American Institute of Integrative Oncology
RESEARCH & EDUCATION

Foundations of Integrative Oncology
COURSE

GRAND ROUNDS CALL
With Dr. Nalini Chilkov
April 15, 2020
5:30 PM Pacific / 6:30 PM Mountain / 7:30 PM Central / 8:30 PM Eastern

Agenda

- **Clinical Pearl**
  - COVID 19 and Cancer - ImmunoNutrition for our Most Vulnerable Patients

- **Case Study**
  - 71 y/o F Breast cancer - Multi-foci invasive mucinous carcinoma
  - 21 y/o M Hodgkin's Lymphoma Stage II

- **Clinical Question:**
  - There have been rumors circulating about Elderberry and its use perpetuating or igniting a cytokine storm in individuals under the weather or sick with viral symptoms (even Covid). What is your take on this?
  - What are the most powerful herbs/supplements to support innate immunity?
  - What are your thoughts on Stephen Buhner's Coronavirus Tinctures protocol?
  - What are your thoughts on elevated M Protein tumor markers for multiple myeloma patients with no physical symptoms?
  - We want to reduce iron intake in cancer but we still tell patients to eat lots of leafy greens, is there a good study you can refer us to, to explain why heme-iron is contraindicated but non-heme iron foods are ok?
  - When a cancer cell metastasises enters a lymph node, it uses fat as fuel, What do we do with the diet of someone with metastatic cancer?

Clinical Pearl: COVID 19 and Cancer - ImmunoNutrition for our Most Vulnerable Patients
Caring for Our Most Vulnerable Patients (see PDF file of Powerpoint slides) **Link to Slides -** **https://aiiore-members-only.s3-us-west-1.amazonaws.com/Grand+Rounds/2020+04+15+Clinical+Pearl+Slides+-+COVID+19+and+Cancer+Patients.pdf**

Case Study: 71 y/o F Breast cancer - Multi-foci invasive mucinous carcinoma

Submitted by: Judy Pruzinsky, L.Ac.

Link to Case Study:
https://aiiore-members-only.s3-us-west-1.amazonaws.com/Grand+Rounds/2020+04+15+CASE+STUDY+-+71+yo+F+Breast+cancer+-+Multi-foci+invasive+mucinous+carcinoma.pdf

Case Study: 21 y/o M Hodgkin's Lymphoma Stage II

Submitted by: Susie Thomson, DipION; NTEC; mBANT; CNHC:

Link to Case Study:
https://aiiore-members-only.s3-us-west-1.amazonaws.com/Grand+Rounds/2020+04+15+CASE+STUDY+-+21+y%3Ao+M+Hodgkin's+Lymphoma+Stage+II.pdf

Questions & Answers

Jaclyn Tolentino D.O

1. **Elderberry and cytokine storm - there have been rumors circulating about its use perpetuating or igniting a cytokine storm in individuals under the weather or sick with viral symptoms (even Covid). What is your take on this?**
2. **What are the most powerful supplements/herbs to support innate immunity - can you outline the top 5?**
3. **What are your thoughts on Stephen Buhner's Coronavirus Tinctures protocol?**

Dr. Chilkov:

Elderberry and cytokine storm - there have been rumors circulating about its use perpetuating or igniting a cytokine storm in individuals under the weather or sick with viral symptoms (even Covid). What is your take on this?

- Overall we must be CAREFUL of botanicals and phytochemicals that UPREGULATE cytokines as this virus hijacks the immune system and creates a cytokine storm. In my opinion there are MANY OTHER OPTIONS for antivirals (see Clinical Pearl Covid 19 and Cancer).

- I would NOT use Elderberry as a single herb. If it happens to be in a balanced formula, it would not be contraindicated.

- There are MANY more choices of herbs that are much more powerful. This internet scare was based on ONE PAPER published in 2001.

What are the most powerful supplements/herbs to support innate immunity - can you outline the top 5?

- Please see the COVID 19 and CANCER Clinical Pearl.
- Remember….we want our patients to be ROBUST and have STRONG IMMUNE FUNCTION long before they are exposed to pathogens...BUT with this virus we must discontinue strong immune

tonics upon exposure to the virus to avoid a cytokine storm.

What are your thoughts on Stephen Buhner's Coronavirus Tinctures protocol?

- I glanced at this but did not read his 9 page paper. I do not know this clinician.
- I am most inclined to use formulas that have shown to be effective with Covid 19 patients in China. Many of these herbs ARE in his protocols AND readily available formulas that I included in the Covid-19 and Cancer Clinical Pearl.
- Chinese Herb formulas have an intelligence to their compositions which makes them very effective.You may wish to listen to Michael McCulloch, OMD DPH. He has 2 webinars on MAYWAY Herbs website on the most recent information coming out of China. Additionally Peter D Adamo has a blog with the results of his information gathering and analysis. His site is datapunk.com.There is A LOT of information and we are all just learning about this virus. No one is an expert yet.

Questions & Answers

Jennifer Jeanty, DNP, APN-C

- What are your thoughts on elevated M Protein tumor markers for multiple myeloma patients with no physical symptoms. She is feeling great but her markers are slightly elevating.

Dr. Chilkov:

What are your thoughts on elevated M Protein tumor markers for multiple myeloma patients with no physical symptoms. She is feeling great but her markers are slightly elevating.

- It is not normal to have M proteins in the blood.This is a sign of disease activity.The oncologist-hematologist may not want to treat in early stages….. but we can certainly intervene with an OUTSMART CANCER plan to manage the cancer terrain and to push back on progression.

- Consider Vitamin A (retinoic acid), Vitamin D3 (cholecalciferol)
- Check for Hypercoagulation This is most often an adverse effect of treatment with Revlimid in these patients, but can be present in any cancer. If present: increase Omega 3 Fatty Acids, Curcumin, and add Dan Shen (Chinese Red Sage Root, Salvia milthiorrhiza)

- Support bone health. MM can invade the bones: DFH Osteoben is a good choice

- There are good Chinese Herbal Formulas used in this type of cancer that can exert control over progression

- Below is an example of herbs that are commonly used:
  - ➢ *Magnolia*
  - ➢ *Rabdosia*
  - ➢ *Licorice Root*
  - ➢ *Green Tea (when not on Velcade)*
  - ➢ *Astragalus*
  - ➢ *Ganoderma*
  - ➢ *Chaga*
  - ➢ *Cordyceps*
  - ➢ *Scutellaria baicalensis*
  - ➢ *Ashwaganda*
  - ➢ *Milk Thistle*

- ➢ *Ginger*
- ➢ *Schisandra*
- ➢ *Lycium*
- ➢ *Tang Kuei*
- ➢ *Gotu Kola*

- The large proteins in the blood can damage nephrons. Consider protecting the health of the kidneys: **Nettle Seed extract** (Urtica dioica leaf) or add it to a custom herbal tonic. Taking it separately assures a higher daily dose.

Questions & Answers

Susie Thomson, DipION; NTEC; mBANT; CNHC:

- We want to reduce iron intake in cancer but we still tell patients to eat lots of leafy greens, is there a good study or two that Dr Nalini can refer us to to explain why heme-iron is contraindicated but non-heme iron foods are ok?

Dr. Chilkov:

We want to reduce iron intake in cancer but we still tell patients to eat lots of leafy greens, is there a good study or two that Dr Nalini can refer us to to explain why heme-iron is contraindicated but non-heme iron foods are ok?

- Iron metabolism is NOT my area of expertise.Typically the amount of non heme iron in leafy greens is small and does not negatively impact the cancer terrain, whereas animal sourced heme iron (as is in our bodies as well) and an oral iron supplement can increase serum levels readily.
- There is some non heme iron in animal foods as well. Heme iron is found in higher amounts on our foods. Iron is a pro-oxidant and will damage tissue and DNA. Heme Iron is linked to increased oxidative stress, cardiovascular disease, cancer and diabetes.Non-Heme iron is not.

- A pub med search on HEME-IRON and OXIDATIVE STRESS yields over 100 references. Here are the first four
  - Caveats for the Good and Bad of Dietary Red Meat. Omaye AT, Omaye ST. Antioxidants (Basel). 2019 Nov 12;8(11). pii: E544. doi: 10.3390/antiox8110544. Review. PMID: 31726758 **Free PMC Article**
  - Diet, iron biomarkers and oxidative stress in a representative sample of Mediterranean population. Romeu M, Aranda N, Giralt M, Ribot B, Nogues MR, Arija V. Nutr J. 2013 Jul 16;12:102. doi: 10.1186/1475-2891-12-102. PMID: 23866833 **Free PMC Article**
  - Heme of consumed red meat can act as a catalyst of oxidative damage and could initiate colon, breast and prostate cancers, heart disease and other diseases. Tappel A. Med Hypotheses. 2007;68(3):562-4. Epub 2006 Oct 11. PMID: 17045417
  - Red Meat Consumption (Heme Iron Intake) and Risk for Diabetes and Comorbidities? Misra R, Balagopal P, Raj S, Patel TG. Curr Diab Rep. 2018 Sep 18;18(11):100. doi: 10.1007/s11892-018-1071-8.Review.

Questions & Answers

Susie Thomson, DipION; NTEC; mBANT; CNHC:

1. When a cancer cell metastasises enters a lymph node, it uses fat as fuel, What do we do with the diet of someone with metastatic cancer? I was advising really low glycemic/adapted keto, now I am not sure what to do.

Dr. Chilkov:

When a cancer cell metastasises enters a lymph node, it uses fat as fuel, What do we do with the diet of someone with metastatic cancer? I was advising really low glycemic/adapted keto, now I am not sure what to do.

Below is the reference paper:

Choong-kun Lee, Seung-hwan Jeong, Cholsoon Jang, Hosung Bae, Yoo Hyung Kim, Intae Park, Sang Kyum Kim, Gou Young Koh. Tumor metastasis to lymph nodes requires YAP-dependent metabolic adaptation. Science, 2019; 363 (6427):644 DOI: 10.1126/science.aav0173

- The lymph node is a lipid rich environment.However the mass of a lymph node is very small. As the lymph node is not highly vascular, it is thus a relatively hypoxic environment and most tumor cells would revert to glycolysis not lipolysis.There is a subset of malignant cells that can maintain normal mitochondrial metabolism and can use fatty acids in any environment in the body.This is true outside the lymph node and inside the lymph node.
- I am not aware of any studies evaluating the impact of a ketogenic diet on metabolic tumor cells that have invaded the lymph node.
- In terms of "observation" of patients on ketogenic diets, we typically see less disease progression as MOST tumor cells are reliant upon glycolysis. There is not enough information to evaluate your question.

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Overview

COVID-19 and Cancer

ImmunoNutrition for Our Most Vulnerable Patients

Dr. Nalini Chilkov, L.Ac., OMD, Founder

American Institute of Integrative Oncology

1

Terminology

COVID-19: The name of the illness

SARS-CoV-2:
The name of the virus causing the disease

2

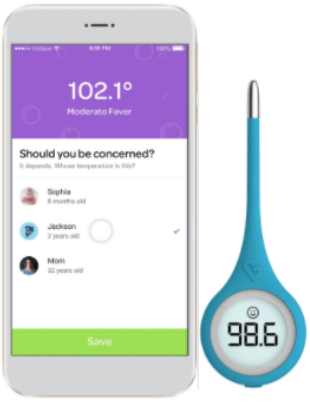
Recommendations: : CDC Prevention Guidelines **Plus**

Engage in Social Isolation
limit contact and observe physical distance
Wear mask to protect self and others
Practice Hand Washing + Mindful Hygiene
Sleep 7-9 hours
Daily Exercise 30 minutes minimum
Nourishing Diet + Proper Hydration
Stress Management+Relaxation
Stay Connected to Others

3

Monitor Body Temperature

Kinsa QuickCare Smart Digital Thermometer
help improve ability to detect outbreaks and stop the spread of illness.
Collects information needed
to know where and when illness is spreading
in real-time, giving the right organizations the
advance warning needed to stop outbreaks.



4

Biomarkers of Progression, Organ Failure and Mortality

Pulse Rate > 125
IL-6 H
LDH H
Ferritin H
CRP H
ALT H. AST H
Lymphocytopenia L
High NLR
Low T helper, suppressor, regulatory cells
Leukocytemia
Low basophils, eosinophils, monocytes.
Thrombocytopenia

Acute kidney injury
Renal Function markers
Acute cardiac injury
Cardiac Troponin
Acidosis
Hypoalbuminemia
Coagulopathy- D Dimer

Secondary infection
ARDS
Septic Shock

HIGH RISK PATIENTS
Hypertension
CVD
Obesity
Diabetes
Cancer
Men (ACE 2 receptor?)
Elders

Clin Infect Dis 2020 Mar 12 **Dysregulation of Immune Response in Patients With COVID-19 in Wuhan, China.** Chuan Qin et al

5

Phases of Viral Syndrome Management

Prevention Enhance Immunity + Promote Viral Resistance

Exposure and Early Mild Symptoms Increased Support to Enhance Immunity + Promote Viral Resistance

Active Infection, Super-Inflammation (Cytokine Storm), Compromised Lung Function, Organ Damage, Hypoxia

Recovery-Repair-Restoration of Function

6

Immunonutrition

Enhancing Immune Function and Viral Immunity

Nutraceuticals
Vitamin A
Vitamin C
Vitamin D
Zinc
Melatonin
N Acetyl Cysteine

Key Botanicals
Scutellaria baicalensis
Andrographis paniculate
Isatis tinctoria
Urtica urens/dioca
Panax quinquifolium

Probiotics

Polysaccharides and Beta Glucans.
(Phase One and Recovery only)
Ganoderma
Coriolus
Cordyceps
Tremella
Astragalus

Phytochemicals
Quercetin (bioflavinoid)
Baicalen, Baicalein (phytophenol)
Resveratrol (stilbene)
Berberine (isoquinoline alkaloid)
Sulphoraphanes (nrf2)

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7

Recommendations: PHASE ONE A Prevention

Support Immune Function
Enhance Viral Resistance

No Viral Exposure-Prevention		**Viral Exposure- Mild and Early Symptoms of Infection**
Melatonin	10-20mg at bedtime	10 mg AM. 10 mg PM 20 mg bedtime
Vitamin A	5000-10,000 iu per day	50,000 iu x 3 days at onset + 10,000 iu /day
Vitamin C	2,000-3,000/day	3,000-5000mg/day
Vitamin D3	5,000-10,000 iu per day	50,000 iu x 3 days at onset + 10,000 iu /day
Zinc chelate	60 mg per day	60 mg twice per day
Mushrooms (Polysaccharides-beta glucans)	3 grams daily	3 grams twice per day
Astragalus Root	3 grams (dry) or 1 tsp extract daily	3 grams (dry) or 1 teaspoon extract twice per day
Health Concerns		
Astra-Isatis or Tremella & Ginseng Formula 3 tabs 2x daily		Health Concerns Clear Heat Formula 3 tabs 4x/day
Acupuncture		Acupuncture

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8

Recommendations: PHASE TWO

Active Respiratory Infection, Fever, Inflammation
Enhance Viral Resistance, Support Inflammation Control

STOP IMMUNE TONICS and IMMUNE STIMULANTS
that increase cytokine storm and hyper up-regulation of immune response

Astragalus
Echinacea
Medicinal Mushrooms
Ganoderma, Coriolus, Cordyceps, Tremella, Maitake, Shitake
Polysaccharides and Beta Glucans

9

Recommendations: PHASE TWO
Active Respiratory Infection, Fever, Inflammation
Enhance Viral Resistance, Support Inflammation Control

Melatonin	10 mg AM. 10 mg PM 20 mg bedtime
Vitamin A	50,000 iu x 3 days at onset + 10,000 iu /day
Vitamin C	3,000-5000mg/day. (Take no more than 500-1000mg at one time)
Vitamin D3	50,000 iu x 3 days at onset + 10,000 iu /day
Zinc chelate	60 mg twice per day
N-Acetylcysteine	900mg twice per day plus 900mg at bedtime
Quercetin	1000mg 3x/day
Resveratrol	1000mg 3x/day

Panax Quinquifolium (American Ginseng) 1000mg 3x/day. (or 1 tsp extract 3x/day)
Health Concerns Clear Heat Formula. 3 pills every four hours

Intravenous IV Vitamin C Acupuncture

10

Recovery-Repair-Repletion-Restoration

Sequela

Fatigue-Exhaustion-Weakness (Qi Deficiency)

Pulmonary damage and fibrosis

Myocardial damage and fibrosis

Hepatic damage and fibrosis

Renal damage and fibrosis (secondary to Rhabdomyolysis)

Loss of Muscle Mass

Compromised Cognitive Function (hypoxia, ventilator, sedation)

Disrupted Gastrointestinal Function

PTSD

Tools and Resources for Recovery

BASICS: Diet-Sleep-Exercise-Hydration

Acupuncture

Nutritional Supplements and Functional Foods

Nourishing, Strengthening, Tonifying Herbs

Support for Stress Resilience

Tai Chi, Chi Gung, Yoga, Prayer, Meditation

Emotional and Spiritual Support

Nature-Sunshine-Fresh Air, Trees, Forest, Lakes, Rivers, Ocean, Open Sky, Gardens

11

NUTRICEUTICALS

12

VITAMIN A

13

Vitamin A (Retinoic Acid)

Vitamin A is an essential trace nutrient for the human immune system

- Modulates Innate and Adaptive Immunity,
- Modulates T Cell Function,
- Modifies TH1/TH2 activity
- Modulates Dendritic Cell Function
- Promotes Healthy Mucosal Epithelial Barriers
- Enhances Mucosal Immunomodulation
- Modifies Inflammatory Responses, Inflammatory Cytokines

Expert Opin Biol Ther. 2015 ; 15(10): 1411–1428. doi:10.1517/14712598.2015.1066331.
Induction of cellular and molecular immunomodulatory pathways by vitamin A and Flavonoids
Sapna Patel and Michael Vajdy†

14

Vitamin A (Retinoic Acid)

Chronic Vitamin A deficiency contributes to histopathological changes in lung tissue, impairment of lung physiology predisposing to lung dysfunction and respiratory disease

Vitamin A may exert a protective effect in respiratory pathologies

Nutrients. 2018 Sep; 10(9): 1132. . doi: 10.3390/nu10091132 PMID: 30134568
Vitamin A Deficiency and the Lung , Joaquín Timoneda, et al

15

Vitamin A (Retinoic Acid)

Vitamin A may affect various processes involved in the onset and progression of fibrotic disease.

However, the therapeutic effects of retinoic acid in such diseases remain controversial.

Multiple studies show Retinoic Acid promotes alveolar regeneration in mice

Int J Mol Sci 2012 Dec 21;14(1):226-43. doi: 10.3390/ijms14010226.
The Controversial Role of Retinoic Acid in Fibrotic Diseases: Analysis of Involved Signaling Pathways
Tian-Biao Zhou, et al

16

VITAMIN C

Vitamin C and **Immune** Function

Vitamin C appears to be able to both prevent and treat respiratory and systemic infections

Ensuring adequate intake of vitamin C through the diet or via supplementation is required for proper immune function and resistance to infections

17

VITAMIN C

Supports Healthy Epithelial Barriers

- Enhances Collagen Synthesis and Stabilization
- Protects against ROS induced Damage
- Enhances keratinocyte differentiation and lipid synthesis
- Enhances fibroblast proliferation and migration
- Shortens time to wound healing

2017 Nov 3;9(11):1211. doi: 10.3390/nu9111211.PMID: 29099763
Vitamin C and **Immune** Function.. Carr AC, Maggini S.Nutrients.

18

VITAMIN C

Role of vitamin C in phagocyte function

- Enhance neutrophil migration in response to chemo-attractants (chemotaxis)
- Enhance engulfment (phagocytosis) of microbes
- Stimulate reactive oxygen species (ROS) generation and killing of microbes.
- Supports caspase-dependent apoptosis, enhancing uptake and clearance by macrophages
- Inhibits necrosis, including NETosis (neutrophil extracellular traps)
- Supports resolution of the inflammatory response
- Attenuates tissue damage.

2017 Nov 3;9(11):1211. doi: 10.3390/nu9111211.PMID: 29099763
Vitamin C and **Immune** Function.. Carr AC, Maggini S.Nutrients.

19

VITAMIN D3 Cholecalciferol

Vitamin D appears capable of inhibiting pulmonary inflammatory responses while enhancing innate defense mechanisms against respiratory pathogens.

Clin Exp Immunol. 2009 Oct; 158(1): 20–25
.Vitamin D and respiratory health. D A Hughes*

20

Vitamin D

Int J Environ Res Public Health. 2019 Sep; 16(17): 3020.
doi: 10.3390/ijerph16173020. PMID: 31438516
Acute Respiratory Tract Infection and 25-Hydroxyvitamin D Concentration: A Systematic Review and Meta-Analysis. Hai Pham, et al

There is an inverse non-linear association between 25(OH)D concentration and Acute Respiratory Tract Infection

Serum 25(OH)D concentration was inversely associated with risk and severity of ARTI

Pooled odds ratios (95% confidence interval) were 1.83 (1.42–2.37) and 2.46 (1.65–3.66), respectively, comparing the lowest with the highest 25(OH)D category.
For each 10 nmol/L decrease in 25(OH)D concentration, the odds of ARTI increased by 1.02 (0.97–1.07). This was a non-linear trend, with the **sharpest increase in risk of ARTI occurring at 25(OH)D concentration < 37.5 nmol/L.**

21

Vitamin D

Rev Med Virol, 27 (1) Jan 2017
Vitamin D Modulation of Innate Immune Responses to Respiratory Viral Infections
Mihnea T Zdrenghea

Effectiveness of vitamin D as an adjuvant in the prevention and treatment of acute respiratory infections

Modulatory and regulatory role in

- **Host defense**
- **Inflammation**
- **Immunity**
- **Epithelial repair**

Patients with respiratory disease are frequently deficient in vitamin D
Respiratory monocytes/macrophages and epithelial cells constitutively express the vitamin D receptor.

22

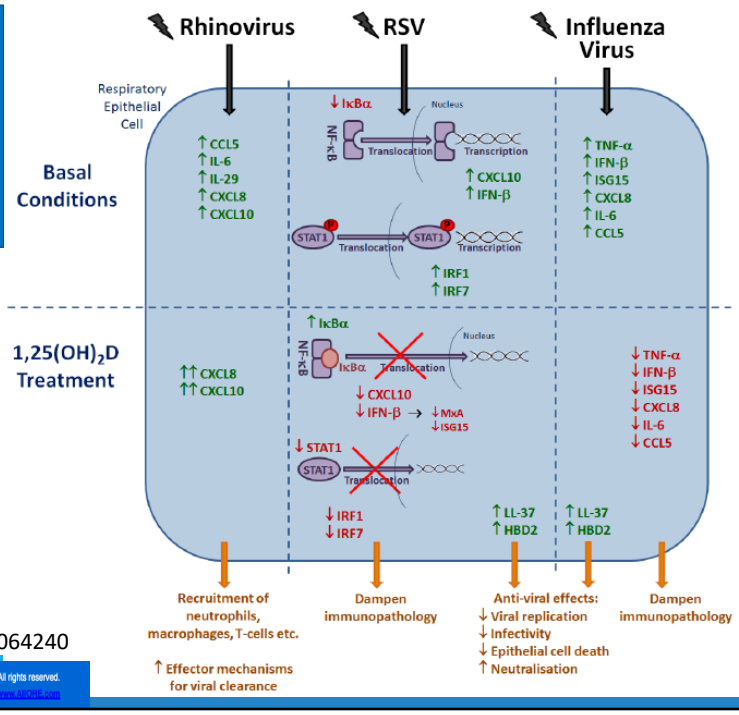
Modulation of the Immune Response to Respiratory Viruses by Vitamin D

Decrease Inflammatory Cytokines & Chemokines

Anti-Viral Effects: Decreased

- Viral Replication
- Infectivity
- Epithelial cell death

Claire L. Greiller * and Adrian R. Martineau
Nutrients 2015, 7, 4240-4270; doi:10.3390/nu7064240



23

ZINC

24

Zinc Can Signal an AntiViral Response

Crucial for maintaining homeostasis of immune system

Repletion reverses impairment in immune system function

Reduces mortality from infectious diseases

Protective against infection in the elderly population

Improves the outcomes of sepsis

Impacts immune cell development and functions in both innate and adaptive immunity

Influences

- NK cell activity
- lymphocyte proliferation
- macrophage phagocytic activity
- neutrophil function
- antibody response

Front. Immunol., 15 January 2019 doi.org/10.3389/fimmu.2018.03160
Nutritional Modulation of Immune Function: Analysis of Evidence, Mechanisms, and Clinical Relevance Dayong Wu et al

25

ZINC

The Role of Zinc in AntiViral Immunity

Improve the antiviral response and systemic immunity

Inhibit viral replication or infection-related symptoms

Zinc deficient populations are at risk for acquiring viral infections

Advances in Nutrition, Volume 10, Issue 4, July 2019, 696–710
https://doi.org/10.1093/advances/nmz013
The Role of Zinc in Antiviral Immunity , Scott A Rea, et al

26

MELATONIN

27

COVID-19: Melatonin as a potential adjuvant treatment

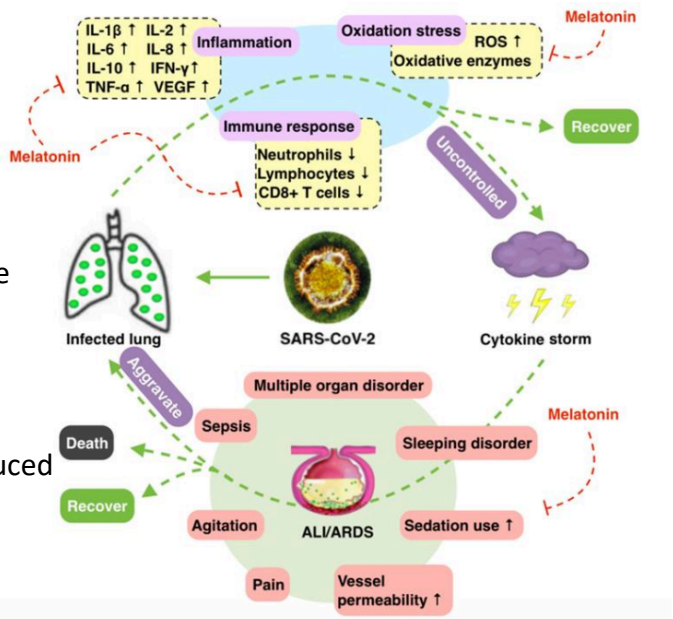
Life Sciences:20 March 2020
R.Zhang,X.Wang,L.Ni, et al.

Indirect Anti Viral Actions

- Decrease Cytokine-Chemokine Release
- Decrease Oxidative Stress
- Decrease Viral Load
- Down Regulation of Acute Lung Oxidative Injury

May have protective effect on sepsis induced

- Renal Injury
- Cardiomyopathy
- Hepatic Injury



28

How Melatonin Buffers the Immune System

Pleiotropic, varied and complex effects of melatonin on the immune system

Melatonin Modulates (up-regulates/down-regulates)

NFkB , TNF-α, IL-1β, IL-6, IL-2, IFN-γ MMP9, MMP6 , NK Cells, Macrophages, Lymphocytes, NO and oxidative stress

Super Antioxidant

Int J Mol Sci. 2013 Apr; 14(4): 8638–8683. doi: 10.3390/ijms14048638

29

How Melatonin Buffers the Immune System

Pleiotropic, varied and complex effects of melatonin on the immune system

Melatonin might act as an **immunostimulant** under basal or immunosuppressed conditions, providing a pre-activated state for a more effective **early immune response** against external stressors such **as viruses and parasites.**

In the presence of a transient or chronic exacerbated immune response, such as septic shock, melatonin might exert negative regulation and could be considered an **anti-inflammatory** molecule**.**

Int J Mol Sci. 2013 Apr; 14(4): 8638–8683. doi: 10.3390/ijms14048638

30

PROBIOTICS

31

Probiotics

Front. Immunol., 15 January 2019
https://doi.org/10.3389/fimmu.2018.03160
Nutritional Modulation of Immune Function: Analysis of Evidence, Mechanisms, and Clinical Relevance
Dayong Wu et al

- Enhance innate immunity: NK cells, phagocytic activity
- Enhance adaptive immunity: maintain regulatory functions of immune system T cells B cells
- Enhance the host's resistance against infection.
- Promote mucosal Integrity in GI and Respiratory Systems
- Modulate mucosal immunity
- Induce pro inflammatory cytokines to facilitate immune response to infections
- Induce anti inflammatory cytokines to modulate and mitigate excessive inflammation

32

Probiotics

The intestinal microbiota influences pulmonary microbial composition and immune responses

Changes in the composition of the intestinal and airway microbiota are associated with chronic lung disorders and respiratory infections

Rate Synth Syst Biotechnol 2018 Mar 12;3(2):113-120. doi: 10.1016/j.synbio.2018.03.001.
Prospective Study of Probiotic Supplementation Results in Immune Stimulation and Improvement of Upper Respiratory Infection. Hong Zhang

Ann Amer Thor Soc Volume 12, Issue Supplement 2 May 01, 2015
The Gut–Lung Axis in Respiratory Disease Metrics. Benjamin J et al

33

MODERN CHINESE HERBAL MEDICINE

34

POLYSACCHARIDES BETA GLUCANS

Chinese Medicinal Mushrooms, Astragalus Root

Beta-glucan is a broad term covering any polysaccharide that is composed of β-d-glucopyranosyl (β-d-Glcp) units as the primary building block.

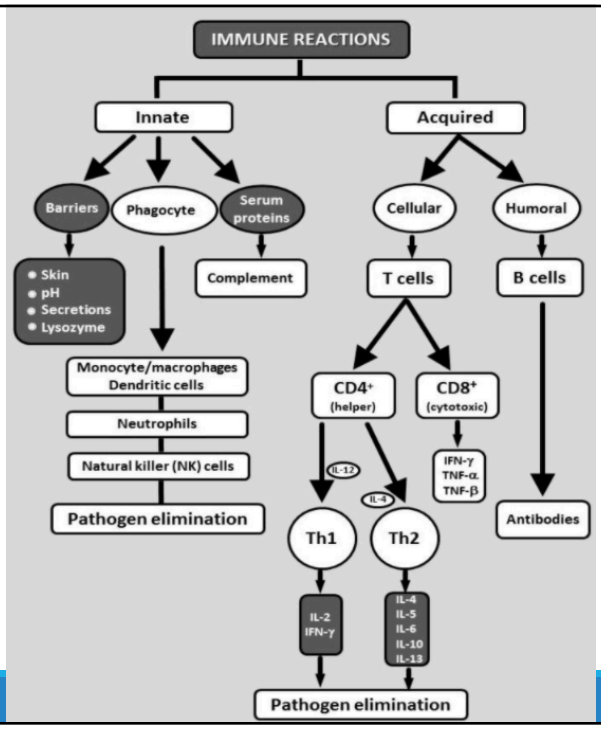
35

BETA GLUCANS and IMMUNITY

Various aspects of the both branches of immune reactions.

Reaction known to be influenced by glucan are represented in WHITE

reactions where glucan has no confirmed effects are shown in BLACK



Molecules. 2019 Apr; 24(7): 1251. . doi: 10.3390/molecules24071251

Beta Glucan: Supplement or Drug? From Laboratory to Clinical Trials

Vaclav Vetvicka, et al

36

Selected Botanicals & Phytochemicals

37

Selected Botanicals and Phytochemicals

Isatis tinctoria/indigotica. (indigo, indirubin) antiviral

Andrographis paniculata (andrographolide) antiviral

Scutellaria baicalensis (berberine, baicalen, baicalein) antiviral, inflammation control, oxidative stress

Panax quinquefolium (ginsenosides) fatigue, oxidative stress, hypercoagulation, cardioprotective, inflammation control (NFkb)

Astragalus membranaceus (Astragalosides) modulate immunity &inflammation, inhibit oxidative stress, inhibit viral replication

38

Selected References

Antiviral Res. 2005 Oct; 68(1): 36–42. doi: 10.1016/j.antiviral.2005.07.002
Anti-SARS coronavirus 3C-like protease effects of *Isatis indigotica* root and plant-derived phenolic compounds
Cheng-Wen Lin,

Arch Virol, 162 (3), 611-623 Mar 2017. **Broad-spectrum Antiviral Properties of Andrographolide** Swati Gupta

Mini Rev Med Chem. 2013 Feb;13(2):298-309.PMID: 23438057
Biological activities and corresponding SARs of andrographolide and its derivatives.
Zhou B, Zhang D, Wu X.

J Ethnopharmacol. 2015 Dec 24;176:475-84. doi: 10.1016/j.jep.2015.11.018. Epub 2015 Nov 11.
Anti-H1N1 **virus**, cytotoxic and Nrf2 activation activities of chemical constituents from **Scutellaria baicalensis**.
Ji S, Li R, Wang Q, Miao WJ, Li ZW, Si LL, Qiao X, Yu SW, Zhou DM, Ye M.

Int J Biol Macromol. 2019 Apr 1;126:179-186. doi: 10.1016/j.ijbiomac.2018.12.207 PMID: 30586589
Astragalus polysaccharide from **Astragalus** Melittin ameliorates inflammation via suppressing the activation of TLR-4/NF-κB p65 signal pathway and protects mice from CVB3-induced **virus** myocarditis.Liu T, Zhang

39

CHINESE HERBAL FORMULAS

40

Tremella & Ginseng Formula (Health Concerns) Prevention/Recovery

Chinese Therapeutic Actions: Tonifies Yin, Qi, Blood, Essence; Strengthens Marrow, Wei Qi, Spleen/Stomach, Lungs, Kidney; Clears Heat and Toxin

Tremella (Bai Mu Er)
American Ginseng (Xi Yang Shen)
Astragalus (Huang Qi)
Schizandra (Wu Wei Zi)
Raw Rehmannia (Sheng Di)
Lycium fruit (Gou Qi Zi)
Lycium bark (Di Gu Pi)
Isatis extract (Ban Lan Gen/Da Qing Ye)
Lonicera (Jin Yin Hua)
Viola (Zi Hua Di Ding)
Ganoderma (Ling Zhi Cao)
Ophiopogon (Mai Men Dong)
Cuscuta (Tu Si Zi)
Dendrobium (Shi Hu)
Milletia (Ji Xue Teng)
Glehnia (Sha Shan)
Tang-keui (Dang Gui)
Tortoise shell (Gui Ban)
Epimedium (Yin Yang Huo)
Citrus (Chen Pi)
Curcuma (Yu Jin)
Licorice (Gan Cao)
Cardamon (Sha Ren)

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41

ASTRA-ISATIS Formula (Health Concerns) 2/3x/day

Immune system tonic for chronic viral infections and inflammations accompanied by fatigue, facial flushing agitation, and lymphatic swelling.

Tonifies Qi, Yin, and Yang Clears Phlegm

Isatis extract leaf & root *Da Qing Ye & Ban Lan Gen*
Astragalus root *Huang Qi*
Bupleurum root *Chai Hu*
Laminaria leaf *Kun Bu*
Codonopsis root *Dang Shen*
Epimedium leaf *Yin Yang Huo*
Lycium fruit *Gou Qi Zi*
Dioscorea root *Shan Yao*
Broussonetia fruit *Chu Shi Zi*
White Atractylodes rhizome *Bai Zhu*
Licorice root *Gan Cao*

42

CLEAR HEAT FORMULA
(Health Concerns) 3/3x/day

Bacterial, Viral, Fungal infections with fever

Clears Heat and Cleans Toxin, Tonifies Kidney Essence, Tonifies Lung Yin
Dissolves Phlegm Nodules

- Isatis extract leaf and root *Da Qing Ye & Ban Lan Gen*
  Oldenlandia herb *Bai Hua She She Cao*
  Lonicera flower *Jin Yin Hua*
  Prunella herb *Xia Ku Cao*
  Andrographis herb *Chuan Xin Lian*
  Laminaria leaf *Kun Bu*
  Viola herb / root *Zi Hua Di Ding*
  Cordyceps fruiting body *Dong Chong Xia Cao*
  Licorice root *Gan Cao*

43

Tonification-Recovery-Restoration
ENHANCE FORMULA (Health Concerns by Dr. Misha Cohen)
8 small herb pills 3x/day

Immune enhancement and immune regulation *in conjunction with disorders of* ***chronic viral inflammation and infection.*** *Useful in persons with chronic viral syndromes,immune dysfunction disorders.*

Chinese Therapuetic Effects:
Tonifies Qi, Blood, Yin, Yang, Essence ***Clears Heat, Cleans Toxin, Strengthens Wei Qi*** *, Clears Phlegm* ***Strengthens Spleen, Stomach, Kidney energy***

Ganoderma (Reishi) fruiting body *Ling Zhi*
Isatis Extract leaf & root *Da Qing Ye & Ban Lan Gen*
Spantholobus root/stem *Ji Xue Teng*
Astragalus root *Huang Qi*
Tremella fruiting body *Bai Mu Er*
Andrographis herb *Chuan Xin Lian*
Lonicera flower *Jin Yin Hua*
Aquilaria sinensis lignum *Chen Xiang*
Epimedium herb *Yin Yang Huo*
Oldenlandia herb *Bai Hua She She Cao*
Cistanche salsa herb *Rou Cong Rong*
Lycium fruit *Gou Qi Zi*
Laminaria leaf *Kun Bu*
Tang Kuei root *Dang Gui*
Hu-Zhang herb *Hu Zhang*
American Ginseng root *Xi Yang Shen*
Schizandra fruit *Wu Wei Zi*
Ligustrum fruit *Nu Zhen Zi*
White Atractylodes root *Bai Zhu*
Rehmannia root *Shu Di Huang*
Salvia root *Dan Shen*
Curcuma tuber *Yu Jin*
Viola herb/root *Zi Hua Di Ding*
Citrus peel *Chen Pi*
White Peony root *Bai Shao*
Ho-shou-wu root *He Shou Wu*
Eucommia bark *Du Zhong*
Cardamon fruit *Sha Ren*
Licorice root *Gan Cao*

44

Nourish Lung Yin Restoration-Recovery

Lily Bulb Formula-Bai He Gu Jin Wan

(Health Concerns-TCMZone)

Nourish and moisten the lungs, clear heat and dryness nourish lung yin

Lily Bulb	Bai He
Raw Rehmannia Root	Sheng Di Huang
Cooked Rehmannia Root	Shu Di Huang
Ophiopogon Root	Mai Men Dong
Fritillaria bulb	Chuan Bei Mu
Platycodon	Jie Geng
Tang Kuei Root	Dang Gui
White Peony Root	Bai Shao
Scrophularia Root	Xuan Shen
Licorice Root	Gan Cao

45

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RESEARCH & EDUCATION

CASE STUDY SUBMISSION

Important: In observance of HIPAA and the sacred trust between care giver and patient, absolutely no patient names or identifying information is to be disclosed. Patient privacy is to be preserved. If you attach any medical records, pathology, surgical or laboratory reports, all names are to be removed.

Date	
Clinician Name & Credentials	
Email	

Describe Your Patient (Please SUMMARIZE and use economy of words. You will have 15 minutes to present)

Age, Gender & Ethnicity	
Body Type	
Values *What is most important to this patient? (Quality of Life, Decision Making, Side Effects?)*	
Stress Resilience	
Other	
Primary Diagnosis & Date *(ex. Breast Cancer L, T3 N1 M0, BRCA1 positive, grade 3, Ki67 > 45%)*	
Secondary Diagnosis *(ex. Diabetes Type 2, Obesity)*	

Patient Status

☐ New Diagnosis ☐ Recurrence ☐ In Treatment ☐ In Recovery ☐ In Remission ☐ At Risk

Concomitant and/or Complicating Factors *(ex: poorly controlled diabetes, insomnia, poor support system)*	
Adverse Effects of Cancer or Cancer Treatments *(ex. anxiety-depression, diarrhea, peripheral neuropathy)*	
Relevant Laboratory, Pathology & Medical Reports *(attach a PDF with patient identifying information removed or summarize)*	

Brief Summary of Recent History

Brief Summary of Additional Relevant Health, Medical, Psycho-Social and/or Family History

Other Relevant Information

Such as Chinese or Ayurvedic diagnosis, Naturopathic/Homeopathic Information, etc. *(ex. Liver Qi Stagnation, Dysbiosis)*

Brief Summary of Relevant Past Oncology or Medical Treatments

(ex. surgery, radiotherapy, chemotherapy, immunotherapy, hormone therapy, drug therapy)

Summary of Recent and Current Treatments

Medical Oncology Care *(surgery, radiotherapy, chemotherapy, immunotherapy, hormone therapy, drug therapy)*

Integrative Oncology Care *(nutraceutical, botanical, phytochemical, acupuncture, energy medicine, other)*

Your 2 Core Questions (stated clearly and succinctly)

1.

2.

Attached Medical Records for Reference (with patient identifying information removed)

Reviewed by Dr. Chilkov 04.15.2020
Case Study: 71 y/o F Breast cancer - Multi-foci invasive mucinous carcinoma
Submitted by: Judy Pruzinsky
Date Submitted: 03/10/2020

Dr. Chilkov Recommendation:

Overview:

Primary Diagnosis:

- **71 y/o F Breast cancer**
- 1/31/20 Excisional biopsy: Breast cancer, Multi-foci invasive mucinous carcinoma,
- 1.1 cm of larger, 0.6 cm smaller, grade II w MBR 6.
- DCIS extensive intraductal, at least 1.6 cm, cribriform and micropapillary
- Grade I, necrosis focal - less than 5mm from margin - more reason for radiation
- ER +, PgR+, HER2 -.

Secondary Diagnosis:

- Oncotype results: two tumors one with recurrence score of 2 other 5,
- Both with distant recurrence risk at 9 years 3%. CT benefit less than 1%,
- 11.0 ER +, 10.0 PR +, 8.3 HER2-
  Dr. NC Comment: Low oncotype scores. Little benefit from CT. Also consider her age.

Concomitant and/or Complicating Factors:

- Osteoporosis

Adverse Effects of Cancer or Cancer Treatments:

- After surgery: skin peel, bad yeast infection,
- Bladder leakage with tube withdrawal bronchospasm and asthma

Relevant Laboratory, Pathology & Medical Reports

- Low lymphocytes 23%
- High glucose 119 Not fasting

Current Treatment:

- ❖ Low lymphocytes 23% high glucose 119 Not fasting
- ❖ General nutraceutical and herbal support: VegeMeal, Probiophage,
  - ➢ Add Carnitine Tartrate to shake for muscle mass, mitochondrial function
- ❖ Hydrolyzyme/Digestzyme and HCl, Vit D, Ocuforce, Lycium Support, HSN, Immunitone or Ultimate Antiox off and on for GI upset: combos of GI Microb X, Olive

Leaf, Oregano, Allicillin

- Additional since dx: Twice Daily, Resveratrol, Melatonin, Curcumin, Immunoberry, CA Support, Omega Synergy changed to Ultra for dosing to 4 gr/day,
  - **I like DFH Resveratrol Supreme (Resveratrol +Quercetin) for ER+ BrCA. Consider this for your "resveratrol" supplement.**

Osteoben changed to Osteoforce and TRF due to Genistein and hormone positive - **I hear mixed views, what are your thoughts?**

- **(Osteoforce contains Copper. I prefer NO COPPER in supplements with cancer history. Genistein is also an aromatase inhibitor. It does not drive ER + cancers Preferentially binds to ER in bone and brain, not in breast)**

CORE QUESTION:

1. **Because of close margins (with good oncotype report) is it important to do the radiation in addition to the AI?**
   - **(She had more than one lesion, plus diffuse disease and close margins. Surgery cannot get it all RT is an extra insurance policy.)**
   - **The course of RT recommended is reasonable...not too aggressive or lengthy**
2. **What are the Side effects?**
   - **Fatigue, Radiation dermatitis, some scatter to lungs and heart depending on location of the field. Some tissue fibrosis. Most SE of RT are not experienced by patient until several weeks into course of treatment**
   - **A BENEFIT of RT: there is a systemic immune response to tumor cells that is durable. This is like a vaccine to her own tumor cells.**
3. **MD said no high dosing of vitamin A, C, E while on radiation - will make it less effective. Is that True? Anything else to not take?**
   - **Avoid nutraceutical oral antioxidants in high doses.**
   - **The amount in a multivitamin will not disrupt RT. The antioxidants in plants do not interfere with RT**
4. **Would it be a valid option to have another surgery done to make sure margins are cleaner instead of radiation? What's more injurious?**
   - **That would be the surgeon's call.**
   - **More surgery brings many more risks.**
   - **Surgeries are NOT being done now unless URGENT due to COVID 19**

Dr. Chilkov Recommendation:

- **Consider Six Gentlemen Formula/Xiang Sha Liu Jun Zi Tang or**
- **Ginseng and Astragaluls/ Bu Zhong Yi QI Tang?**
- **CUSTOM TONIC to Support Immunity, Tumor Control, Aromatase inhibition**

- I would like to see her take a formula like this two weeks on two weeks off for one year
  1 teaspoon twice daily
  30 Scutellaria Baicalensis Huang Qin
  30 Scutellaria barbata Ban Zhi Lian
  30 Astragalus Huang Qi
  30 Ganoderma Ling Zhi
  20 Oldenlandia diffusa Bai Hua She She Cao
  20 Curcuma longa (Yu Jin)
  20 Camelia chinensis (Green Tea)
  20 Uritca dioca Root (aromatase inhibitor)
  10 Taxus brevifolia tips
  10 Citrus Reticulata Chen Pi
  10 Zingiber off, dried Ginger Root Gan Jiang
  10 Glycyrrhiza Gan Cao

APMG
Associated Pathology Medical Group, Inc.

PATIENT INFORMATION	PHYSICIAN INFORMATION
[redacted]	William S. Berg, M.D. Palo Alto Medical Foundation - Radiology 2025 Soquel Ave. Santa Cruz, CA 95062
Patient ID: [redacted]	

SPECIMEN INFORMATION

Collected:	01/06/2020	
Received:	01/06/2020	1:50 pm
Reported:	01/08/2020	2:02 pm

Referring Physician: Berg, William

SURGICAL PATHOLOGY REPORT

CLINICAL INFORMATION

CLINICAL HISTORY:

CALCIFICATIONS

FINAL DIAGNOSIS

DIAGNOSIS:

RIGHT BREAST, 6:00, STEREOTACTIC CORE NEEDLE BIOPSIES:
A. FOCAL AREAS OF EXTRACELLULAR MUCIN CONTAINING ATYPICAL GLANDULAR EPITHELIUM, SUSPICIOUS FOR INVASIVE MUCINOUS OR COLLOID CARCINOMA. (SEE COMMENT.)
B. MODERATELY SIZED DILATED DUCTS CONTAINING ATYPICAL PAPILLARY EPITHELIAL PROLIFERATION MOST SUGGESTIVE OF INTRADUCTAL PAPILLOMA INVOLVED BY DCIS.
C. MICROCALCIFICATIONS ARE ASSOCIATED WITH THE ATYPICAL PAPILLARY EPITHELIAL PROLIFERATION BUT ARE NOT ASSOCIATED WITH COMEDO TYPE NECROSIS.
D. SMALL TO MODERATELY SIZED DUCTS LOCATED AWAY FROM INTRADUCTAL PAPILLARY NEOPLASM DEMONSTRATING ARCHITECTURAL AND CYTOLOGIC ATYPIA MOST CONSISTENT WITH LOW NUCLEAR GRADE DCIS OF PREDOMINANTLY CRIBRIFORM ARCHITECTURAL TYPE.

COMMENT: Slides A and C each demonstrate intraductal papillary epithelial proliferation that appears to be involved by low nuclear grade ductal carcinoma in situ of predominantly cribriform architectural type. Slide C also shows several detached fragments of papillary epithelial proliferation more consistent with intraductal papilloma. The ductal carcinoma in situ present on slide A shows focal central necrosis of neoplastic cells but does not demonstrate high nuclear grade or true comedo type necrosis. Slide B demonstrates two moderate sized ducts involved by fairly rigid low nuclear grade epithelial proliferation suggestive of low-grade DCIS.

In addition to the above described findings, slide A also demonstrates several small pools of mucin that contain small clusters of mildly atypical epithelial cells. These are quite suspicious for invasive mucinous or colloid carcinoma. The maximum dimension of any contiguous focus of possible invasive mucinous carcinoma appears to be slightly greater than 1 mm and is most likely not microinvasive in nature.

The histologic findings described above strongly warrant complete excision of the radiographic abnormality. Given the presence of at least 1 mm of probable invasive mucinous carcinoma, and perhaps a larger lesion, we do recommend sentinel lymph node sampling at the time of surgical treatment. We have performed estrogen and progesterone receptor staining on block A containing the probable invasive carcinoma, and will attempt to have NeoGenomics perform HER2 studies on this block if enough invasive carcinoma remains. Appropriate clinical correlation and followup are strongly recommended. Dr. Westphal has reviewed all three slides and concurs with the diagnosis.

Carlene A. Hawksley, M.D., Medical Director
M. Quinn Wickham, M.D.
Dominican Hospital, Associated Pathology Medical Group, Inc, 1555 Soquel Drive, Santa Cruz, CA 95065 (831)462-7625 FAX (831)462-7607
Frozen section slides processed at 1555 Soquel Dr. Santa Cruz, CA 95065, CLIA cert. #05D0606603.
Permanent slides processed at APMG, 105A Cooper Ct. Los Gatos, CA 95032 (408)399-5050, CLIA cert. #05D0712326

APMG
Associated Pathology Medical Group, Inc.

PATIENT INFORMATION	PHYSICIAN INFORMATION
[redacted]	Sutter Maternity and Surgery Center
Patient ID: [redacted]	Sutter Maternity & Surgery Center
	2900 Chanticleer Avenue
	Santa Cruz, CA 95065

SPECIMEN INFORMATION

Collected:	01/31/2020	
Received:	02/03/2020	10:24 am
Reported:	02/07/2020	3:20 pm

Referring Physician: DeSimone, Christopher
Copies sent to: Sutter Maternity and Surgery Center

SURGICAL PATHOLOGY REPORT

CLINICAL INFORMATION

CLINICAL HISTORY:

MALIGNANT NEOPLASM OF LOWER INNER QUADRANT OF RIGHT FEMALE BREAST

FINAL DIAGNOSIS

DIAGNOSIS:

1. **RIGHT AXILLARY SENTINEL LYMPH NODE, EXCISIONAL BIOPSY:**
   ONE LYMPH NODE NEGATIVE FOR MALIGNANCY ON MULTIPLE LEVEL SECTIONS EXAMINED.

   COMMENT: After the initial H&E stained section did not demonstrate evidence of metastatic tumor, we performed deeper levels x2 from the paraffin block. These confirm the absence of metastatic disease.

2. **RIGHT BREAST, WIRE LOCALIZATION EXCISIONAL BIOPSY:**
   A. PROMINENT REPARATIVE CHANGES PRESENT IN THE INFERIOR HALF OF THE SPECIMEN CONSISTENT WITH PREVIOUS CORE NEEDLE BIOPSY SITE.
   B. TWO APPARENTLY SEPARATE AND DISTINCT FOCI OF GRADE I INVASIVE DUCTAL CARCINOMA WITH EXTENSIVE EXTRACELLULAR MUCIN QUALIFYING AS MUCINOUS OR COLLOID CARCINOMAS. (SLIDE 2C IN SLICE 6 AND SLIDE 2J IN SLICE 9.)
   C. THE LARGER FOCUS OF INVASIVE DUCTAL CARCINOMA IS ADJACENT TO THE PREVIOUS BIOPSY SITE ON SLIDE 2J AND MEASURES 1.1 CM IN MAXIMUM DIMENSION.
   D. SMALLER FOCUS OF INVASIVE DUCTAL CARCINOMA IS PRESENT IN BREAST TISSUE AWAY FROM THE PREVIOUS BIOPSY SITE (SLIDE 2C) AND MEASURES 0.6 CM IN MAXIMUM DIMENSION.
   E. SURGICAL RESECTION MARGINS NEGATIVE FOR INVOLVEMENT BY INVASIVE DUCTAL CARCINOMA WITH THE CLOSEST APPROACH OF INVASIVE TUMOR IN SLICE 6 TO THE POSTERIOR MARGIN MEASURING 2 MM AND THE CLOSEST APPROACH OF THE INVASIVE TUMOR IN SLICE 9 MOST CLOSELY APPROACHING THE POSTERIOR MARGIN TO WITHIN 3 MM.
   F. EXTENSIVE DUCTAL CARCINOMA IN SITU OF LOW NUCLEAR GRADE AND PREDOMINANTLY CRIBRIFORM ARCHITECTURAL TYPE IS PRESENT IN CONSECUTIVE SLICES FROM SLICE 6 TO SLICE 11, MEASURING 1.6 CM IN MAXIMUM DIMENSION BY GLASS SLIDE MEASUREMENT.
   G. DUCTAL CARCINOMA IN SITU DEMONSTRATES FOCAL CENTRAL NECROSIS AND FOCALLY PROMINENT COARSE MICROCALCIFICATIONS.

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M. Quinn Wickham, M.D.
Dominican Hospital, Associated Pathology Medical Group, Inc, 1555 Soquel Drive, Santa Cruz, CA 95065 (831)462-7625 FAX (831)462-7607
Frozen section slides processed at 1555 Soquel Dr. Santa Cruz, CA 95065, CLIA cert. #05D0606603.
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APMG
Associated Pathology Medical Group, Inc.

PATIENT INFORMATION	PHYSICIAN INFORMATION
	Sutter Maternity and Surgery Center Sutter Maternity & Surgery Center 2900 Chanticleer Avenue Santa Cruz, CA 95065

SPECIMEN INFORMATION

Collected:	01/31/2020	
Received:	02/03/2020	10:24 am
Reported:	02/07/2020	3:20 pm

Referring Physician: DeSimone, Christopher
Copies sent to: Sutter Maternity and Surgery Center

SURGICAL PATHOLOGY REPORT

H. DUCTAL CARCINOMA IN SITU VERY CLOSELY APPROACHES THE SUPERIOR MARGIN TO WITHIN LESS THAN 0.5 MM (SLIDE 2A) AND MOST CLOSELY APPROACHES THE POSTERIOR RESECTION MARGIN TO WITHIN 2 MM, WITH ALL OTHER MARGINS GREATER THAN 2 MM FOR DCIS.

I. NON-NEOPLASTIC BREAST PARENCHYMA DEMONSTRATES PROMINENT PROLIFERATIVE FIBROCYSTIC CHANGES INCLUDING ATYPICAL DUCTAL HYPERPLASIA, WITHOUT DEFINITE ATYPICAL INTRADUCTAL PAPILLARY PROLIFERATION IDENTIFIED. (SEE COMMENT.)

COMMENT: We have reviewed the patient's previous core needle biopsies of the right breast at 6:00 (P20-39.) Those biopsies showed a single focus of extracellular mucin containing atypical glandular epithelium that was highly suspicious for invasive mucinous or colloid carcinoma. That focus measured approximately 1 mm with associated extensive intraductal atypical proliferation most consistent with low nuclear grade ductal carcinoma in situ of predominantly cribriform architectural type. Some of the features in the prior core biopsies raised the possibility of an intraductal papillary neoplasm involved by low-grade ductal carcinoma in situ. Complete excision of the radiographic abnormality with consideration for sentinel lymph node sampling was recommended at that time.

In the current wire localization excisional biopsy, the biopsy site is identified within slices 8-11 (total of 13 slices.) The tissue adjacent to the previous biopsy site does demonstrate residual invasive mucinous carcinoma that does not involve surgical resection margins. There appears to be a second focus of invasive mucinous carcinoma at some distance from the prior biopsy site change, which also has negative surgical resection margins. The breast tissue, however, also demonstrates quite extensive ductal carcinoma in situ of low nuclear grade and predominantly cribriform architectural type. There is a spectrum of intraductal atypia ranging from atypical ductal hyperplasia in some of the biopsies away from the prior biopsy site to definite low nuclear grade DCIS. Microcalcifications are associated with some of the foci of DCIS despite the lack of comedo type necrosis. There is focal central necrosis of the DCIS present as well. Unfortunately, the ductal carcinoma in situ is present on slide 2A representing slice 1 containing the superior margin sectioned perpendicular to the inked margin. This focus of DCIS closely approaches the blue inked margin to within less than 0.5 mm. Appropriate clinical correlation and followup are recommended.

Dr. Westphal has reviewed slides 2A, 2C, 2J, 2L, and 2M and concurs with the diagnosis.

COMMENT: SYNOPTIC REPORT: BREAST

AJCC pTNM Staging (8th Edition).

PROCEDURE: Excision with wire localization.
SPECIMEN LATERALITY: Right.

TUMOR SITE: 6:00.
TUMOR SIZE: 1.1 cm.

APMG
Associated Pathology Medical Group, Inc.

PATIENT INFORMATION	PHYSICIAN INFORMATION
	Sutter Maternity and Surgery Center Sutter Maternity & Surgery Center 2900 Chanticleer Avenue Santa Cruz, CA 95065

SPECIMEN INFORMATION

Collected:	01/31/2020	
Received:	02/03/2020	10:24 am
Reported:	02/07/2020	3:20 pm

Referring Physician: DeSimone, Christopher
Copies sent to: Sutter Maternity and Surgery Center

SURGICAL PATHOLOGY REPORT

HISTOLOGIC TYPE OF INVASIVE CARCINOMA: Invasive mucinous carcinoma.

HISTOLOGIC GRADE: Grade II with a total MBR score of 6 (tubules 3, nuclei 2, mitoses 1).

TUMOR FOCALITY: Multiple foci of invasive carcinoma as described above with the larger measuring 1.1 cm and the smaller measuring 0.6 cm.

DUCTAL CARCINOMA IN SITU: DCIS is present and positive for extensive intraductal component.
SIZE (EXTENT) OF DCIS: At least 1.6 cm by glass slide measurement.
ARCHITECTURAL PATTERNS: Cribriform and micropapillary.
NUCLEAR GRADE: Grade I or low.
NECROSIS: Present, focal.
LOBULAR CARCINOMA IN SITU: No LCIS is present.

MARGINS:
INVASIVE CARCINOMA: Uninvolved by invasive carcinoma with the closest approach to the posterior resection margin for both foci of invasive mucinous carcinoma measuring greater than 2 mm.
DCIS: Not definitively involved by DCIS, but the closest approach of DCIS to the superior margin measures less than 0.5 mm and the closest approach of DCIS to the posterior resection margin measures 2 mm.

REGIONAL LYMPH NODES:
UNINVOLVED BY TUMOR CELLS
NUMBER OF LYMPH NODES EXAMINED: 1.
NUMBER OF SENTINEL LYMPH NODES EXAMINED: 1.

TREATMENT EFFECT: No known presurgical therapy.

LYMPH-VASCULAR INVASION: Not identified.

PATHOLOGIC STAGING:
PRIMARY TUMOR: mpT1c.
REGIONAL LYMPH NODES: pN0(sn).

ADDITIONAL PATHOLOGIC FINDINGS: Extensive proliferative fibrocystic changes with atypical ductal hyperplasia.

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SURGICAL PATHOLOGY REPORT

ANCILLARY STUDIES (PERFORMED ON PRIOR CORE BIOPSY P20-39):

BREAST BIOMARKER RESULTS:
ESTROGEN RECEPTOR (ER): Positive.
PERCENTAGE OF TUMOR NUCLEI STAINING: 100%.
AVERAGE INTENSITY OF STAINING: Strong.
INTERNAL CONTROLS PRESENT AND STAINING APPROPRIATELY: Yes.
COMMENT: The ductal carcinoma in situ present on this slide also shows strong nuclear staining of 100% of the neoplastic cells.
PROGESTERONE RECEPTOR (PgR): Positive.
PERCENTAGE OF TUMOR NUCLEI STAINING: 100%.
AVERAGE INTENSITY OF STAINING: Strong.
INTERNAL CONTROLS PRESENT AND STAINING APPROPRIATELY: Yes.
COMMENT: The ductal carcinoma in situ present on this slide demonstrates strong nuclear staining of 100% of the neoplastic cells.

HER2 (BY IMMUNOHISTOCHEMISTRY): Negative at 0.

HER2 (BY IN SITU HYBRIDIZATION): Negative.

USING DUAL PROBE ASSAY
AVERAGE NUMBER OF HER2 COPY SIGNALS PER NUCLEUS: 2.3.
AVERAGE NUMBER OF CEN17 COPY SIGNALS PER NUCLEUS: 2.2.
HER2/CEN17 RATIO: 1.0.

INVASIVE TUMOR NUCLEI SCORED: 50.

COLD ISCHEMIA AND FIXATION TIMES MEET THE REQUIREMENTS SPECIFIED IN THE LATEST VERSION OF THE ASCO/CAP GUIDELINES (Cold ischemia time < 1 hour: fixation time 6-72 hours): Yes.
Fixation time: 8-10 hrs

METHODS

FIXATIVE: Formalin.

ESTROGEN RECEPTOR:
FOOD AND DRUG ADMINISTRATION (FDA) CLEARED (SPECIFY TEST/VENDOR): Dako.

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PATIENT INFORMATION	PHYSICIAN INFORMATION
[redacted]	Sutter Maternity and Surgery Center Sutter Maternity & Surgery Center 2900 Chanticleer Avenue Santa Cruz, CA 95065

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SURGICAL PATHOLOGY REPORT

PRIMARY ANTIBODY: EP1

PROGESTERONE RECEPTOR:
FDA CLEARED TEST/VENDOR: Dako
PRIMARY ANTIBODY: PgR 636

These tests were performed on formalin fixed paraffin embedded tissue using IHC. The performance characteristics of the above tests have been determined by APMG. While some antibodies have not been approved by the FDA, clearance/approval is not mandated. These antibodies are well documented and clinically accepted prognostic indicators. These tests should not be regarded as part of research investigations. Known positive and negative control tissues show appropriate staining. Visualization for ER and PR is EnVision Flex+, High-pH (Link); and for HercepTest is dextran polymer conjugated HP and affinity isolated goat anti-rabbit IG, followed by DAB chromogen. These results should be used in the context of clinical/pathologic findings.

COMMENT:
The HER2 studies by IHC and FISH were performed by NeoGenomics reference laboratory. Please see their report (accession #2511012) for additional information regarding methodology.

COMMENT: The invasive mucinous carcinoma present in this case is essentially identical to the small focus of invasive mucinous carcinoma seen in the prior biopsies on which the above studies were performed. The estrogen and progesterone receptor staining was quite intense and diffuse and it does not appear to be necessary to repeat those stains on the current material. Nevertheless, given the small focus of invasive carcinoma present in the prior biopsy for HER2 testing, we will repeat HER2 studies performed by NeoGenomics reference laboratory on paraffin block 2C.

I have reviewed the quality of any H&E staining on this case and it is acceptable.
CAH/km

PATHOLOGIST: Carlene A. Hawksley, M.D.

SPECIMEN DATA

SPECIMEN TYPE/LOCATION:

1. Lymph node, right axillary sentinel
2. Breast, right

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SURGICAL PATHOLOGY REPORT

GROSS DESCRIPTION:

1. Received are two containers labeled with the patient's name 'Winthers, Laurie'.
The first specimen is received in a single formalin-filled container additionally labeled 'right axillary sentinel lymph node' and consists of a 1.2 x 0.9 x 0.9 cm tan-yellow lymph node candidate that is serially sectioned and submitted entirely in one cassette.

2. The second specimen is received in a single formalin-filled container additionally labeled 'right breast mastectomy short stitch superior, long lateral, double deep' and consists of an oriented 46.6 gram lumpectomy specimen that measures 6.6 cm superior to inferior, 6.1 cm medial to lateral, 3.1 cm from superficial to deep (short suture superior, long suture lateral, double suture deep). A needle localization wire extends from the superficial aspect of the specimen. The specimen is inked as follows: superior - blue, inferior - green, lateral - yellow, medial - violet, superficial - orange and deep - black. The specimen is serially sectioned from superior to inferior into 13 slices (slice 1 - superior margin, slice 13 - inferior margin) to show a 1.7 x 1.6 x 1.2 cm ill-defined yellow chalky indurated lesion within slices 8-11, 0.1 cm from deep, 0.8 cm from superficial, 1.8 cm from inferior, 1.9 cm from lateral and greater than 2.0 cm from superior. No biopsy clip is identified (the history says the patient declined her clip). The remaining parenchyma is greater than 95% yellow lobulated adipose tissue and less than 5% dense white fibrous tissue. No additional mass lesions are identified. Representative sections are submitted (the lesion is submitted entirely) as follows: 2A - superior margin perpendicularly sectioned, 2B-D - slice 6 trisected, 2E - representative slice 7 adjacent to lesion, 2F&G - representative slice 8 lesion, 2H-K - slice 9 entirely composite with lesion, 2L&M - representative slice 10 lesion, 2N - representative slice 11 lesion, 2O -representative slice 12 adjacent to lesion, 2P - inferior margin perpendicularly sectioned.
NL:km

Genomic Health®

oncotype DX®
Breast Recurrence Score

Oncotype DX Breast Recurrence Score® Report

Node Negative

[redacted]

Report Number: [redacted] Report Date: 18-Mar-2020

Specimen Source/ID: **Breast/U20-528-2J**

Ordering Physician: **Dr. Glenn Donald Wong**

Recurrence Score® (RS) Result

5

Decision on individual treatment especially around the RS 25 cutoff may consider other clinical factors.

Distant Recurrence Risk at 9 Years

With AI or TAM Alone

3%

95% CI (2%, 4%)

TAILORx

AI = Aromatase Inhibitor / TAM = Tamoxifen
CI = Confidence Intervals

Group Average Absolute Chemotherapy (CT) Benefit*

RS 0-10 All Ages

<1%

95% CI (-6%, 3%)

NSABP B-20

*For estimated CT benefit for individual RS results, see page 2.

Exploratory Subgroup Analysis for TAILORx and NSABP B-20:
Absolute CT Benefit for Distant Recurrence by Age and RS Result

Age	RS 0-10	RS 11-15	RS 16-20	RS 21-25	RS 26-100
>50 years	No CT Benefit (<1%)				>15% CT Benefit
≤50 years	No CT Benefit (<1%)		~1.6% CT Benefit	~6.5% CT Benefit	>15% CT Benefit

Quantitative Single-Gene Scores

10.5 ER Positive

<3.7 6.5 ≥12.5

9.7 PR Positive

<3.2 5.5 ≥10.0

8.5 HER2 Negative

<7.6 10.7 11.5 ≥13.0

Laboratory Director(s): William P. Joseph, M.D.
Genomic Health, Inc., 301 Penobscot Drive, Redwood City, CA 94063, USA - CLIA Number 05D1018272

Genomic Health®

oncotype DX®
Breast Recurrence Score

Oncotype DX Breast Recurrence Score® Report

Node Negative

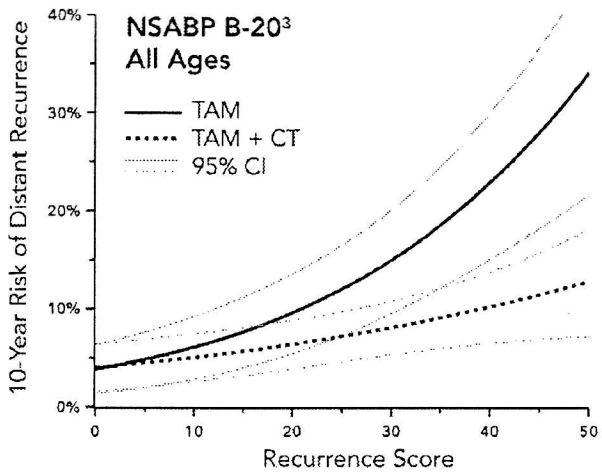
[redacted]

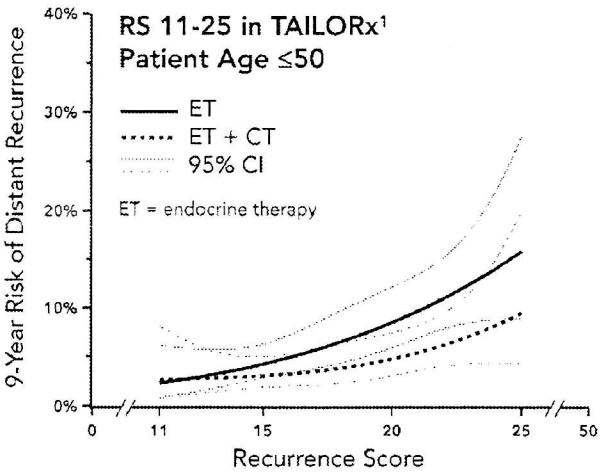
Report Number: [redacted] Report Date: 18-Mar-2020

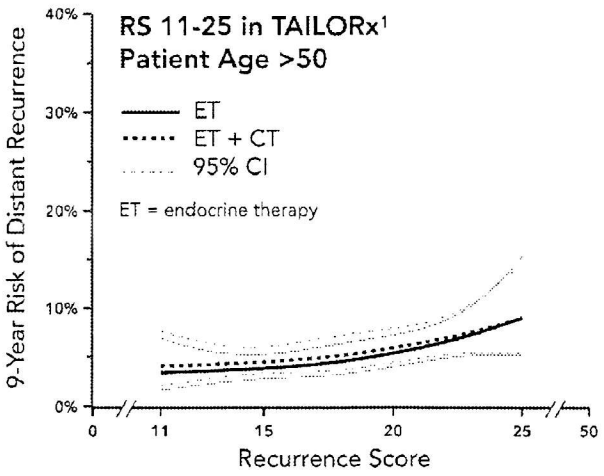
Specimen Source/ID: **Breast/U20-528-2J**

Ordering Physician: **Dr. Glenn Donald Wong**

Estimated Chemotherapy Benefit for Individual Recurrence Score Results







Recurrence Score ranges shown above reflect randomized patients in NSABP B-20 and TAILORx.

Genomic Health®

oncotype DX®
Breast Recurrence Score

Oncotype DX Breast Recurrence Score® Report

Node Negative

[redacted]

Report Number: [redacted] Report Date: **18-Mar-2020**

Specimen Source/ID: **Breast/U20-528-2J**

Ordering Physician: **Dr. Glenn Donald Wong**

Medical Record/Patient #:

Date of Collection: **31-Jan-2020**

Specimen Received: **17-Feb-2020**

The Oncotype DX Breast Recurrence Score test uses RT-PCR to determine the expression of a panel of 21 genes (16 cancer-related, 5 reference) in tumor tissue.

The Oncotype DX Breast Recurrence Score test uses RT-PCR to provide prognostic and predictive information to guide the systemic treatment decisions with hormonal therapy and/or chemotherapy for patients diagnosed with ER+, HER2- invasive breast cancer. Decisions on treatment should also be based on independent medical judgment of the treating physician taking into consideration all available information concerning the patient's medical condition, including other pathological tests, in accordance with your communities' standard of care.

The **Recurrence Score (RS) Result**, which ranges from 0-100, is calculated from the quantitative RT-PCR analysis of the 21 genes.

The **Distant Recurrence Risk** at 9 Years (Prognosis), in patients with N–, ER+ breast cancer treated with endocrine therapy alone, is provided by the TAILORx[1] trial for RS 0-25 and by the NSABP B-14[2] trial for RS 26-100. Risk is for individual RS results. The 95% confidence intervals for distant recurrence at 9 years are ±2% or less for RS 0-22, and range from ±3% to ±11% as RS increases from 23-50. The TAILORx trial enrolled 10,273 patients and 5,018 patients with RS 0-25 were treated with endocrine therapy (tamoxifen or an aromatase inhibitor) alone. The NSABP B-14 trial enrolled 668 patients who were treated with tamoxifen alone.

The **Absolute Benefit of Chemotherapy** for all ages is provided by the TAILORx trial for RS 11-25 and by the NSABP B-20[3] trial for RS 0-10 and RS 26-100. Results for the reduction in distant recurrence at 9 years are for the TAILORx-defined RS groups 0-10, 11-25, and 26-100. TAILORx trial enrolled 10,273 patients and 6,711 were randomized to endocrine therapy (tamoxifen or an aromatase inhibitor) alone or endocrine therapy plus chemotherapy (including anthracyclines and/or taxanes). The NSABP B-20 clinical trial enrolled 651 patients who were randomized to treatment with tamoxifen alone or tamoxifen plus CMF/MF chemotherapy. The magnitude of the absolute benefit of chemotherapy was ~6% at RS 26, and increased as the RS results increased from 26-100, with an average absolute benefit of ~24% and a conservative group estimate of >15% based on the width of the confidence intervals.

Exploratory Subgroup Analysis for TAILORx and NSABP B-20 indicate that RS and age are the strongest predictors of chemotherapy benefit. The absolute reduction of distant recurrence from chemotherapy for patients >50 years and ≤50 years is shown here for RS groups: 11-15, 16-20, and 21-25 from TAILORx, and 0-10 and 26-100 from NSABP B-20.

Quantitative Single-Gene Scores for quality control. The Oncotype DX test uses quantitative RT-PCR to determine the RNA expression of ER, PR, and HER2, using the published validated cut-offs[4]. The standard deviations of single-gene results are less than 0.5 units. The RT-PCR single-gene results may differ from ER, PR, or HER2 results reported using other methods or reported by other laboratories.

References:

1. Sparano et al. *N Engl J Med.* 2018.; ECOG and Genomic Health (data on file). 2. Paik et al. *N Engl J Med.* 2004. 3. Paik et al. *J Clin Oncol.* 2006.; Sparano and Paik *J Clin Oncol.* 2008.
4. Badve et al. *J Clin Oncol.* 2008.; Baehner et al. *J Clin Oncol.* 2010.

Join other breast cancer patients to learn about genomics and help transform patient care: MyOncotype.com

American Institute of Integrative Oncology
RESEARCH & EDUCATION

CASE STUDY SUBMISSION

Important: In observance of HIPAA and the sacred trust between care giver and patient, absolutely no patient names or identifying information is to be disclosed. Patient privacy is to be preserved. If you attach any medical records, pathology, surgical or laboratory reports, all names are to be removed.

Date	
Clinician Name & Credentials	
Email	

Describe Your Patient (Please SUMMARIZE and use economy of words. You will have 15 minutes to present)

Age, Gender & Ethnicity	
Body Type	
Values *What is most important to this patient? (Quality of Life, Decision Making, Side Effects?)*	
Stress Resilience	
Other	
Primary Diagnosis & Date *(ex. Breast Cancer L, T3 N1 M0, BRCA1 positive, grade 3, Ki67 > 45%)*	
Secondary Diagnosis *(ex. Diabetes Type 2, Obesity)*	

Patient Status

☐ New Diagnosis ☐ Recurrence ☐ In Treatment ☐ In Recovery ☐ In Remission ☐ At Risk

Concomitant and/or Complicating Factors *(ex: poorly controlled diabetes, insomnia, poor support system)*	
Adverse Effects of Cancer or Cancer Treatments *(ex. anxiety-depression, diarrhea, peripheral neuropathy)*	
Relevant Laboratory, Pathology & Medical Reports *(attach a PDF with patient identifying information removed or summarize)*	

Brief Summary of Recent History

Brief Summary of Additional Relevant Health, Medical, Psycho-Social and/or Family History

Other Relevant Information

Such as Chinese or Ayurvedic diagnosis, Naturopathic/Homeopathic Information, etc. *(ex. Liver Qi Stagnation, Dysbiosis)*

Brief Summary of Relevant Past Oncology or Medical Treatments

(ex. surgery, radiotherapy, chemotherapy, immunotherapy, hormone therapy, drug therapy)

Summary of Recent and Current Treatments

Medical Oncology Care *(surgery, radiotherapy, chemotherapy, immunotherapy, hormone therapy, drug therapy)*

Integrative Oncology Care *(nutraceutical, botanical, phytochemical, acupuncture, energy medicine, other)*

Your 2 Core Questions (stated clearly and succinctly)

1.

2.

Attached Medical Records for Reference (with patient identifying information removed)

PROPOSED TREATMENT PLAN **Your case will not be reviewed without a completed proposed treatment plan**

Nutriceutical, Phytochemical and Botanical Supplements (name of supplement, dosing) **Foundation Nutrition Supplements:** **Targeted Supplements:**
Functional Foods and/or Therapeutic Shake
Dietary Guidelines
Lifestyle Guidelines
Recommended Diagnostics
Referrals to specialists

Other Notes (please do not include additional notes in your email – notate them here within the case study)

Reviewed by Dr. Chilkov 04.15.2020.
Case Study: 21 y/o M Hodgkin's Lymphoma Stage II
Submitted by: Susie Thomson
Date Submitted: 03/31/2020

Dr. Chilkov Response:

Overview:

Primary Diagnosis:

- 21 y/o M Hodgkin's Lymphoma Stage II
  - ➢ *With a 21 yo patient you have an opportunity to help him to grow up, and get some wisdom and compassion from this experience, to help him to cope and to understand how to use this as a transformational experience*

Adverse Effects of Cancer or Cancer Treatments: (see my notes below)

- Itch,
- Skin redness,
- Nausea,
- Headache,
- Tummy ache,
- Fatigue,
- Loss of appetite, gum/mouth sores, lightheaded, persistent and localised aches
-

Manage Side Effects

- ➢ *WATCH FOR HYPERCOAGULATION (D Dimer, Fibrinogen)*

On day 6 of each chemo cycle add these supplements Stop the day before the next infusion

- ➢ *DFH Detox Anti-Ox 2/3x/day*
- ➢ *Milk Thistle Extract (HERBPHARM) 1 teaspoon twice daily*

- ➢ *Daily*
- ➢ *L-Glutamine 1 level teaspoon 3x/day*
- ➢ *Astragalus Extract (HERBPHARM) 1 teaspoon twice daily*
- ➢ *Health Concerns Marrow Plus 3/2x/day*

If neuropathy

- ➢ *Add Daily Acetyl L Carnitine 1000mg 2x/day*
- ➢ *Bone Broth 2-4 cups daily*

Relevant Laboratory, Pathology & Medical Reports -

➢ **See Below**

Additional Relevant Health or Family History:

- Recurrence of colds, Sore throats,
- Swine flu during childhood.

Current Treatment:

❖ Chemotherapy, BEACOPP *bleomycin, etoposide, doxorubicin, cyclophosphamide, vincristine, procarbazine [Matulane], prednisone*

➢ *This is a very toxic treatment but has a 91% survival rate and this patient is young and should be resilient*

CORE QUESTION:

1. **How to supplement during treatment without compromising chemotherapy effect OR How to persuade the doctors that supplements won't interfere with treatment?**
   a. **You can never PERSUADE another doctor that supplements won't interfere. You CAN build a relationship of mutual respect and trust over time. It is up to the patient to build his own team and make his own informed decisions.**
   b. **With a complex chemo-cocktail there are many drug-herb and drug nutrient interactions to be concerned about. Stick with FOUNDATION NUTRIENTS and manage adverse effects with Functional foods and tonic herbs (food like) during chemotherapy**

2. **How to maintain white cells level?**
   a. **Astragalus Root extract concurrently 1 teaspoon twice daily**
   b. **Ganoderma (Ling Zhi, Reishi) 3 grams daily**

3. **Is alcohol allowed in between treatments (Patient asking, I have explained it is better to avoid all toxins).**
   a. **Absolutely NOT. This is a very hepatotoxic treatment. Alcohol is hepatotoxic Alcohol is a carcinogen. He is 21 years old. He needs to think LONG TERM about his lifestyle habits such as alcohol.**

Dr. Chilkov Recommendation:

DAILY FOUNDATION NUTRIENTS can be taken concurrently with CHEMOTHERAPY

➢ ITI Prothriver Wellness Multi 1/2x/day
➢ DFH Vitamin D Supreme (start with 1 cap daily, measure blood levels and adjust)
➢ Klaire Therbiotic Complete 1/2x/day
➢ DFH Buffered Magnesium Chelate (glycinate) 2/2x/day

- DFH Omegavail TG 1000 1/2x/day

Discontinue these supplements during chemotherapy

- **Curcumin**
- **Resveratrol**
- **DIM**
- **I3C**
- **Green Tea**
- **CoQ10**
- **Fucoidan**
- **Quercetin**

When he completes his chemotherapy, then he will need a recovery-repair plan and a LONG TERM PLAN for a healthy long life.

Hospital El Pilar
Centre Cardiovascular Sant Jordi
Grupo quironsalud

C/ Balmes, 271, 08006 BARCELONA
Tfno: 932 36 05 00
http://www.clinicadelpilar.org/

INFORME DE ALTA DE HOSPITALIZACIÓN

Motivo Alta:

TO WHOM IT MAY CONCERN

REASON FOR CONSULTATION : fever

BACKGROUND Allergies: No and other pathologies.

CURRENT DISEASE : 21-year-old man who refers to the influenza process started two weeks ago that presented improvement 1 week ago, for the current date he presents rhinorrhea and fever 38.7, a week in bed, today chills and discomfort, myalgia. Patient refers relapse of their symptoms after an asymptomatic week.

Entrance to Internal Medicine: Work on a sailboat as a staff. Referring from November 2019 progressive tiredness, weakness that needs rest (nap) for 20 minutes and recovers. Refer mild epistaxis on 12-2-20 and remember 3 times for 3 months.Referred to as a recent family history his father was diagnosed with Myasthenia ?. He had as treatment fluids, paracetamol and levofloxacino.

PHYSICAL EXPLORATION on admission to the emergency room.- Constant on admission: TA: 119/59; FC: 102; T ɪ: 37.9; Sat O2: 100; EVA: 2; - General state: conscious, oriented, collaborative. Well nourished and hydrated. - Head and neck: normal. - Normal pulses. - Scan of t煮ax: rhythmic tones. Do not blow or rub. - Pulmonary auscultation: Eupneic, normal vesicular murmur.

SUPPLEMENTARY TESTS -

Analytical 10-2-20: leucocytes 9.6 segmented 83.3, absolute neutrophils 8.0 PCR 2.5. - Influenza A by Negative PCR. Influenza B by Negative PCR (ESR) Red blood cells 5.6 x 10 ^ 6 µl (4.3 - 5.9) Hemoglobin 13.6 g / dl (13 - 17) Hematocrit 44% (40 - 54) Mean corpuscular volume (MCV) 79 fl (80 - 100) * Average corpuscular hemoglobin (HCM) 24 pg (26 - 34) Hemoglobin concentration 31 g / dl (32 - 36) * Corpuscular Average (CHCM) Erythrocyte distribution width 16% (11 - 16) (RDW) Leukocytes 9.6 x 10^3 µl (3.5 - 11)% segmented 83.8% (45 - 75) *% lymphocytes 9.1% (20 - 45) *% monocytes 6.6% (2 - 10)% eosinophils 0.4% (0 - 6)% basophils 0.1% (0 - 2) Neutrophils (V. Absolute) 8.0 x 10^3 µl (1.6 - 7.5) * Lymphocytes (V. Absolute) 0.9 x 10^3 µl (0.9 - 3.4) Monocytes (V. Absolute) 0.6 x 10^3 µl (0.0 - 1.2) Eosinophils (V. Absolute) 0.0 x 10^3 µl (0.0 - 0.6) Basophils (V. Absolute) 0.0 x 10^3 µl (0.0 - 0.3) Platelets 384 x 10^3 µl (150 - 450) D-dimer 314 ng / mL (Inf. 255) Serum glucose 107 mg / dl (74 - 109) Serum creatinine 0.73 mg / dl (0.70 - 1.20) Glomerular filtration rate (CKD-EPI) 132 ml / min Serum sodium 136 mmol / l (137 - 145) * Serum potassium 4.5 mmol / l (3.5 - 5.1)

12-2-20: Serum C reactive protein 2.5 mg / dL (Inf. 0.5) * 60 pg / mL NT-proBNP <300 ng / LT Prothrombin time 15 sg Quick 92% index (70 - 130) INR 1.05 (0.80 - 1.20) Plasma fibrinogen 5.7 g / L (1.70 - 5.0) partial thromboplastin time 30 sg (22 - 38) activated (TTPA) TTP Ratio 1.0 (Inf. 1.3) Serum glucose 97 mg / dl (74 - 109) Uric acid serum 4.8 mg / dl (3.4 - 7.0) Serum albumin 3.9 g / dl (3.5 - 5.2) Sodium serum 139 mmol / l (137 - 145) Potassium serum

Hospital El Pilar
Centre Cardiovascular Sant Jordi
Grupo quironsalud

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Tfno: 932 36 05 00
http://www.clinicadelpilar.org/

INFORME DE ALTA DE HOSPITALIZACIÓN

Nº Historia Clínica: 2020006089

COOI	
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Fecha	
Servic	
Garan	
Motiv	

4.7 mmol / l (3.5 - 5.1) AST (GOT) serum 27 U / L (Inf. 40) ALT (GPT) serum 48 U / L (Inf. 41) * Alkaline phosphatase serum 100 U / L (40 - 129) Gamma-GT serum 55 U / L (10 - 71) Iron serum 27 µg / dl (33 - 193) * Serum ferritin 329 ng / ml (18 - 464) Serum transferrin 201 mg / dl (206 - 381) * Saturation rate of 11% (20 - 40) * serum transferrin TSS serum 2.21 µUI / ml (0.270-4.20) (34) Serum C reactive protein 3.3 mg / dL (Inf. 0.5) ** **Ac. nmol / L Acetylcholine Receptors (Inf. 0.20) (serum * R. Pending. Normal TSH.**

IMAGES:

RX TORAX: mediastinal widening in the anterior and upper middle mediastinum.

TORAX TAC: Left anterosuperior mediastinal lesion, voluminous hypodense lesion with mild contralateral involvement, intimate contact with pericardium and anterior parietal pleura, without costal involvement is identified. It is associated with superior paratracheal adenopathy (12mm), prevascualr (18mm) opsilateral hilar (12.5mm), infracarinal (13-18.5mm) and isolated periesophageal proximal to the diaphragmatic hiatus (9mm). It suggests thymoma as the first possibility, associated mediastinal adenopathies

TORAX NMR: no medical report available but CD with images is given

DIAGNOSTICS

1) FEBRILE SYNDROME (NO INFLUENZA)

2) TIMOMA vs LYMPHOMA

Patient decides to be evaluated in his country of origin in France. He leaves the hospital in good condition with all his exams and images,.

Dra. IMPERIA BRAJKOVIC
Núm. col.legiat. 57522

Fecha: 13/02/2020 13:19
Fdo: BRAJKOVIC -, IMPERIA ELIZABETH
Nº Colegiado: 57522
Servicio de MEDICINA INTERNA - H

Health Diagnostic

Hospital El Pilar
Centre Cardiovascular Sant Jordi

Balmes, 271 - 08006 - Barcelona - 93 236 05 00 - radiologia.cpilar@quironsalud.es

N

		Fecha Realización	Fecha Informe
TAC TORACIC	HEP.20200030750	10/02/2020 14:47	10/02/2020

Centro solicitante

MOTIVO

sindrome febril joven de 21a que trabaja en barcos. silueta mediastínica ensanchada, neutrofilia 8.000. Torax

INFORME

TECNICA:
Se realizan cortes axiales desde apex pulmonares hasta suprarrenales tras la administracion de contraste IV

HALLAZGOS:
Estructuras mediastínicas centradas. A nivel de mediastino anterosuperior izquierdo, se identifica voluminosa lesion hipodensa con leve afectacion contralateral y aparece en intimo contacto con pericardio posteriomente y con la pleura parietal anteriormente, sin afectacion costal ni de las partes blandas. No se identifican calcificaciones ni areas grasas (descartaria teratoma) ni necroticas/quisticas.Presenta unas dimensiones aprox. 52 x 78 x 82mm
Se asocia a adenopatias mediasticnicas a nivel paratraqueal superior (12mm) prevasculares (18mm), hiliares ipsilaterales (11-12.5mm) e infracarinales (13-18.5mm)
Aislada periesofagica proximal al hiato diafragmatico (9mm)
Hilios pulmonares de tamaño y morfología normal.
Parenquimas pulmonares sin alteraciones significativas.
Espacio pleural libre.
Pared torácica sin alteraciones valorables.
En los cortes axiales de hemiabdomen superior,se observa parénquima hepatico homogéneo.
Suprarrenales de tamaño y morfologia normal.
Nodulillo esplenico accesorio.

CONCLUSIONES:
Lesion mediastinica anterosuperior, que dado su comportamiento, sugeriría Timoma como primera posibilidad.
Adenopatias mediastinicas asociadas.

Firmado: YOLANDA ROCA VANACLOCHA
Núm. Colegiado: 34002

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Centre de Compétences pour les Maladies Pulmonaires Rares et

Centre de Compétences pour l'Hypertension Pulmonaire
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Centre du Sommeil
Tel : 04.92.03.80.59 - Fax : 04.92.03.80.42

Hôpital de Semaine
Tel : 04.92.03.80.59 - Fax : 04.92.03.80.42

Hôpital de Jour
Tel : 04.92.03.85.80 - Fax : 04.92.03.88.20

Hospitalisation conventionnelle
Tel : 04.92.03.80.52 - Fax : 04.92.03.84.40

Soins Intensifs Respiratoires
Tel : 04.92.03.80.57

PÔLE CŒUR – VAISSEAUX – THORAX – POUMON –REIN
Chef de Pôle : Pr Reda Hassen-Khodja
Cadres supérieurs : Mme Dominique Plasson – Mr Raphael Ortega
SERVICE DE PNEUMOLOGIE, ONCOLOGIE THORACIQUE
ALLERGOLOGIE ET SOINS INTENSIFS RESPIRATOIRES
Chef de Service : Professeur Charles-Hugo Marquette
marquette.c@chu-nice.fr
Tel : 04 92 03 88 83

Nice, le 5 mars 2020

3/1998, a été hospitalisé du 24/02/2020 au
, pour
Ponction transthoracique sous scanner d'une **masse médiastinale antérieure d'allure ganglionnaie.**
A noter que les marqueurs hormonaux des tumeurs germinales sont négatifs.

Cette ponction a été réalisée dans le but
- ☒ d'assurer le diagnostic histologique
- ☐ d'effectuer l'analyse biologique moléculaire
- ☐ de mettre en place un clip fiduciaire

Mode de vie et facteurs de risques
Tabagisme : NON
Exposition professionnelle à l'amiante : NON

ATCDts et comorbidités
Aucun

Clinique

Poids (kg)	taille (m.cm)	IMC
64	1,71	22

Amaigrissement de 0 kg au cours des 6 derniers mois

Performance Status (OMS) : 0
0 personne normale – activité physique intacte – efforts possibles sans limitation
1 réduction des efforts – autonomie complète
2 autonome – se fatigue facilement – nécessité de se reposer (lit ou fauteuil) moins de la moitié des heures de veille.
3 personne dépendante – lever possible – nécessité de se reposer (lit ou fauteuil) plus de la moitié des heures de veille.

4 dépendance totale – état quasi grabataire – totalement confiné au lit ou au fauteuil

Plainte fonctionnelle notable : Aucune.
Eupnée en air ambiant avec SPO2 à 99 %,
Pas de douleur thoracique,
Pas de dysphonie,
Murmure vésiculaire bilatéral et symétrique au retour de la ponction sous scanner.

Suites de la ponction
La ponction s'est déroulée sans complication immédiate
La prise en charge a consisté en une surveillance.
Les radiographies thoraciques de surveillance ne montrent pas de pneumothorax

CONCLUSION
Ponction sous scanner d'une masse médiastinale antérieure.
Pas d'incident au cours et au décours de la procédure. Les radiographies de contrôle ne mettent pas en évidence de pneumothorax iatrogène.

Résultats de l'analyse anatomopathologique :

Conclusion:
Biopsies d'une masse médiastinale antérieure montrant un infiltrat lymphocytaire avec quelques polynucléaires éosinophiles associés au sein de vastes territoires de fibrose, sans territoire suspect de malignité dans la limite du matériel examiné. Si une suspicion clinique persiste, une analyse sur de nouveaux prélèvements est souhaitable.

PET-TDM ce jour : Hypermétabolisme intense de nombreuses adénopathies sus diaphragmatiques évoquant plutôt un lymphome de haut grade ; à confronter aux données histologiques.

Patient porteur de BMR ou BHRe : NON
Patient transfusé au cours du séjour : NON
Evènement indésirable : NON

Les éventuels résultats en attente seront transmis au(x) médecin(s) référent(s)

Suite à donner
x le patient sera revu par son médecin référent le Pr MOUROUX le 27/02/2020

Je reste à votre disposition pour tout renseignement complémentaire et vous prie d'agréer,Cher Confrère, mes salutations très cordiales.

Docteur C. Noghi — **Médecin Responsable**

J. Rousset — **Interne**

"Courrier relu et validé électroniquement par le médecin signataire"

		UF : 7226 B5 - Medecine
	Poids (kg) : 60,00 Taille (cm) : 170	Prot. : **BEACOPP renforce**
	Surf. corp. (m²) : 1,69 Créat. (µmol/L) 62	Inclusion par : Dr BOSCAGLI Annick
	Chambre Implantable	Prescrit le : 18/03/2020 par JARAUDIAS Claire
		Cure : 1 Jour 1 = 18/03/2020 (Cycle : 21j ; Trt : 15j)

okc1j1ibt

Jour : **2** Date : **19/03/2020**

D.C.I. et Produits	Dose Protocolaire	Dose prescrite	Modalités Diluant	Volume	Durée	Voie	Chrono	Heure réelle	Visa	Commentaire
na cl iso spvc 100ml	100 mL	**100 mL**			30'	IVP	H0			Branchement
procarbazine cp	100 mg/m²	**150 mg**			-	PO	H0			
solupred 20mg cp orodisp	40 mg	**40 mg**			-	PO	H0			
metoclopramide 10mg/2ml inj	20 mg	**20 mg**			02'	IVD	H0 + 0h05			
etoposide	200 mg/m²	**338 mg**	NaCl	1000	1h	IVP	H0 + 0h30			
na cl iso spvc 50ml	50 mL	**50 mL**			15'	IVP	H0 + 1h30			

Jour : **3** Date : **20/03/2020**

D.C.I. et Produits	Dose Protocolaire	Dose prescrite	Modalités Diluant	Volume	Durée	Voie	Chrono	Heure réelle	Visa	Commentaire
na cl iso spvc 100ml	100 mL	**100 mL**			30'	IVP	H0			Branchement
procarbazine cp	100 mg/m²	**150 mg**			-	PO	H0			
solupred 20mg cp orodisp	40 mg	**40 mg**			-	PO	H0			

Plateau Technique Saint-Jean
52-54, Avenue des Alpes - 06800 Cagnes sur mer
Fax: 04 93 20 50 09

Cerballiance

ologiste médical : Dr Zoubir Adjtoutah

CENTRE ANTOINE LACASSAGNE
36 AV DE VALOMBROSE

06189 NICE

*** ACCUEIL LABO ***

Enregistré le 20.03.2020 à 06:44
Prélevé le 20.03.2020 à 06:39
Chambre n° 10 **Service** 7225

HEMATOLOGIE

NUMERATION GLOBULAIRE

Variation d'impédance-Photométrie-Cytométrie de flux - DxH - BC

Hématies.....:	**4 140 000**	/mm3	4,6 à 6 200 000	4.010.000	Le 19.03.2020
Leucocytes.....:	**7 300**	/mm3	4 000 à 11 000	9.700	
Hemoglobine.....:	**10,3**	g/dL	13,0 à 18,0	10,0	
Hematocrite.....:	**31,8**	%	37,0 à 50,0	30,6	

CONSTANTES ERYTHROCYTAIRES

T.C.M.H.....:	**24,9**	pg/hem	27 à 32	24,9
C.G.M.H.....:	**32,3**	g/dL	31 à 36	32,6
V.G.M.....:	**77**	fL	79 à 97	76

FORMULE LEUCOCYTAIRE

P.N.neutrophiles.....:	**5 770**	/mm3	1 500 à 7 500	7.170
soit :	79,1	%		73,9
P.N.eosinophiles.....:	**90**	/mm3	0 à 600	50
soit :	1,3	%		0,5
P.N.basophiles.....:	**10**	/mm3	0 à 200	30
soit :	0,2	%		0,3
Lymphocytes.....:	**940**	/mm3	1 100 à 4 400	1.460
soit :	12,9	%		15,0
Monocytes.....:	**470**	/mm3	200 à 800	1.000
soit :	6,5	%		10,3

NUMERATION PLAQUETTAIRE

Impédance - DxH - Beckman Coulter

BOZIC STEPHANE

Dossier Médical du Patient

Né(e) le [illegible]

Prélevé le 20.03.2020 à 06:39
Prescrit par Docteur HEBERT CHRISTOPHE
Examen n° 0026
Chambre n° 7225 -10

CENTRE ANTOINE LACASSAGNE

HEMATOLOGIE

Plaquettes.....:	291 000	/mm3	150 à 400 000	305.000	Le 19.03.2020
VPM.....:	8,2	fL	7.4 à 10.4	8,1	

COAGULATION

			Valeurs de référence	Antécédents	
Taux de Prothrombine...:	88	%		86	Le 19.03.2020
I.N.R.....:	1,0	.		1,0	

Compris entre 70% et 100%

TEMPS DE CEPHALINE-ACTIVATEUR

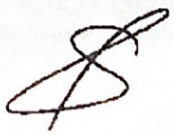
Chronométrie / APTT - STAR Evo - Stago

Temoin.....:	*34*	sec		34	
Patient.....:	45	sec		45	
Rapport Patient/Temoin.:	1,33		< 1,2	1,32	
Taux de fibrinogène....:	7,0	g/L	2 à 4	6,4	

Méthode de Clauss/ STA Liquid Fib- STAR Evo - Stago

BIOCHIMIE SANGUINE

			Valeurs de référence	Antécédents	
SODIUM.....:	138	mmol/L	136 à 146	138	Le 19.03.2020
Potentiométrie indirecte - Gamme AU - Beckman Coulter					
POTASSIUM.....:	3,9	mmol/L	3,4 à 4,5	4,1	
Potentiométrie indirecte - Gamme AU - Beckman Coulter					
CHLORE.....:	102	mmol/L	101 à 109	103	
Potentiométrie indirecte - Gamme AU - Beckman Coulter					
RESERVE ALCALINE.....:	27	mmol/L	21 à 31	26	
PEPC - Gamme AU - Beckman Coulter					
PROTIDES TOTAUX.....:	68	g/L	66 à 83	67	
Biuret - Gamme AU - Beckman Coulter					



BOZIC STEPHANE

Né(e) le 01.08.1998
Prélevé le 20.03.2020 à 06:39
Prescrit par Docteur HEBERT CHRISTOPHE
Examen n° 0026
Chambre n° 7225 -10

CENTRE ANTOINE LACASSAGNE

BIOCHIMIE SANGUINE

			Valeurs de référence	Antécédents
CALCIUM.....:	**2,26**	mmol/L	2,20 à 2,65	2,23 Le 19.03.2020
Arsenazo III - Gamme AU - Beckman Coulter	*90,4*	mg/L	88 à 106	
PHOSPHORE.....:	**1,20**	mmol/L	0,81 à 1,45	1,43
Molybdate, UV - Gamme AU - Beckman Coulter	*37,20*	mg/L	25 à 45	
MAGNESIUM PLASMATIQUE..:	**0,75**	mmol/L	0,73 à 1,06	0,70
Bleu de Xylidyle - Gamme AU - Beckman Coulter	*18,00*	mg/L	18 à 26	
UREE.....:	**3,4**	mmol/L	2,8 à 7,2	4,0
Uréase-GLDH - Gamme AU - Beckman Coulter	*0,20*	g/L	0,17 à 0,43	
CREATININE.....:	**60**	µmol/L	64 à 104	59
Enzymatique - Gamme AU - Beckman Coulter	**6,8**	mg/L	7,2 à 11,8	

ESTIMATION DU DEBIT DE FILTRATION GLOMERULAIRE

MDRDs.....:	**148**	ml/min/1.73m²		150

Une multiplication par un facteur 1.21 est nécessaire pour les patients originaires d'Afrique Sub-Saharienne ou des Antilles.

INTERPRETATION

Patients sans pathologie rénale connue:

> ou = à 60: valeur normale pour un sujet sain sans autres signes biologiques ou clinique de maladie rénale

< à 60: baisse du débit de filtration glomérulaire estimé ne permettant pas isolément d'affirmer une maladie rénale

CKD-EPI.....:	**137**	ml/min/1.73m²		

Estimation validée pour la population caucasienne

ACIDE URIQUE.....:	**<89**	µmol/L	208,3 à 428,4	<89
Uricase PAP - Gamme AU - Beckman Coulter				
TRANSAMINASE SGOT.....:	**13**	UI/L	< 50	16
IFCC - Gamme AU - Beckman Coulter				
TRANSAMINASE SGPT.....:	**11**	UI/L	< 50	17
IFCC - Gamme AU - Beckman Coulter				

BOZIC STEPHANE

Dossier Médical du Patient

CENTRE ANTOINE LACASSAGNE

[illegible] 20.03.2020 à 06.39
Prescrit par Docteur HEBERT CHRISTOPHE
Examen n° 0026
Chambre n° 7225 -10

BIOCHIMIE SANGUINE

			Valeurs de référence	Antériorités
GAMMA-GT..................:	**36**	UI/L	[illegible]	[illegible]
PHOSPHATASES ALCALINES.:	**76**	UI/L	30 à 120	[illegible]
BILIRUBINE TOTALE.......:	**10,9**	µmol/L	[illegible]	[illegible]
	6,4	mg/L	[illegible]	
BILIRUBINE DIRECTE......:	**2,5**	µmol/L	[illegible]	[illegible]
	1,5	mg/L	< 2	
BILIRUBINE INDIRECTE....:	**8,4**	µmol/L		[illegible]
	4,9	mg/L		
LDH......................:	**183**	UI/L	[illegible]	[illegible]
PROTEINE-C-REACTIVE.....:	**141,7**	mg/L	< 5	[illegible]
ALBUMINE.................:	**31,6**	g/L	35 à 52	[illegible]
	461	µmol/L		

[illegible]

Lymphoma or lymphatic cancer

Overview

Lymphomas are a group of blood cancers which originate from lymphocytes (white blood cells of the immune system), the main types being Non-Hodgkin's (NHL) and Hodgkin's lymphoma plus many others.

Lymphomas are largely driven by environmental toxin exposure and not lifestyle; chemo and radiation for other disease can be a contributing factor as well as exposure to herbicides, pesticides and chemical pollutants. Glyphosate is a major concern for lymphoma risk.

Immune issues like HIV, hepatitis C, CMV, EBV can double the risk of lymphoma occurrence.

Obesity & high BMI can lead to worse outcomes for some kinds of lymphoma.

Auto-immune conditions have been associated with a slightly higher risk of lymphoma.

Smoking, alcohol use and sedentary lifestyle increase chance of diagnosis as well as several genetic variants PLUS environmental toxin exposure.

Tri-cyclic anti-depressants have been found to contribute to NHL.

Usual treatment for lymphoma is chemotherapy and/or chemo + radiotherapy but could just be 'active' surveillance. Immunotherapy, proton-therapy and bone marrow transplantation are other options. Stem-cell treatment also an option. New vaccine looks promising.

During lymphoma, your immune system is compromised and you become more susceptible to infections.

Detoxification of heavy metals and healing any gut issues are of utmost importance in improving the outcome of lymphoma. Optimal gut function will help the immune system.

Diet Plan

Emphasize

- Whole foods – unprocessed food in its natural form or as close as possible
- Brassicas: broccoli, cauliflower, kale, cabbage, Brussel sprouts, rocket for I3C & DIM
- Omega 3s from smaller oily fish: salmon, herring, anchovies, mackerel & sardines. Cod & tuna but no larger than the size of a salmon to avoid heavy metals. Wild caught or organic.

- High fiber from whole grains, beans, veggies and fruits
- Healthy fats: avocado, nuts, seeds, olive oil, coconut oil, hemp, flax, cold-water fish
- Low sugar, low carb foods: choose brown instead of white; rice, pasta, bread….
- Animal protein: choose organic poultry and fish over red meat. Meat should be grass-fed and organic and used as a 'condiment', ie a ¼ - 1/3 of your plate, the rest being piled high with veggies of all colours.

Avoid

- Non-organic food; food treated with herbicides and pesticides
- Processed and grilled meats; red meat
- Fast foods, fried foods, baked goods, package foods, processed foods
- Sugar, fake sugar and artificial sweeteners* - linked to lymphoma progression
- Vegetable oils – corn, canola, sunflower, soy, safflower, shortening, margarine and anything hydrogenated or partially hydrogenated

Lifestyle

- Maintain a healthy weight
- Do not smoke (especially + hep C = x4 risk of NHL)
- Eat a low glycemic diet especially if you are pre or diabetic
- Exercise is well known to prevent cancer development - MOVE!
- Mindfulness – yoga, meditation, tai chi, CardioZen app, Headspace app.

Supplements

There are many said to help slow progression of cancer development and also to help efficacy of treatments while ameliorating the side-effects of treatment. Here are a few to consider to target lymphoma:

- Vitamin D: low levels are associated with shorter-term survival. Vitamin D deficiency is common in cancer and chemotherapy also lowers levels. It is important to have good levels of vitamin D for our immune system and also to fight cancer; several chemo drugs are found to be more effective at killing cancer cells when vitamin D is supplemented (inc. cisplatin). Good vitamin D levels are 50-80 ng/ml. 25-OH and 1,25 dihydroxy should both be measured. It is important to check levels regularly as a lymphoma

patient may have rapid conversion ie the blood levels may increase quickly and we want to avoid toxicity. Best advice is to start off with lower dose supplementation augmenting according to blood test results and getting up to 5000iu in remission for prevention (2000iu + daily depending on blood levels)

- Curcumin: high anti-cancer effects; particularly good evidence for Hodgkin's. Increases the sensitivity to cisplatin (200-400mg x3 daily)

- Resveratrol: inhibits EBV in Burkitt's and induces cell death in Hodgkin's (100-200mg daily)

- Green Tea (EGCG): 5 cups of green tea daily can reduce lymph cancers by 50% and in concomitant use with curcumin, can slow B-cell NHL.

- Indole-3-carbinol: found to increase cell death in adult T-cell lymphoma (200-400mg daily)

- DIM: significantly reduces T-cell acute lymphoblastic leukemia cells as well as reducing lymphoma tumors (250mg daily)

- Fucoidan: a seaweed extract which kills cancer cells especially B-cell lymphomas but may interact with certain chemo drugs.

- Forskolin: present in the root of an Indian plant has been seen to induce cell death of NHL.

- Quercetin: this flavonoid helps induce cell death in large B-cell lines and can enhance some chemo drugs eg rituximab (200-400mg daily)

- CoQ10: this antioxidant reduces cancer cell activity in Burkitt's and also found to have protective effects in various other cancers (100mg daily)

References

After cancer care (2015) Lemole G, Mehta P, McKee D.
https://www.canceractive.com/article/lymphoma-or%20lymphatic%20cancer%20symptoms%20causes%20and%20alternative%20treatments
https://www.canceractive.com/article/lymphoma-or%20lymphatic%20cancer%20symptoms%20causes%20and%20alternative%20treatments
Monitoring the microbiome in leukemia patients could reduce infections during chemotherapy by American Society for Microbiology

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4026755/

https://www.google.com/search?client=safari&rls=en&sxsrf=ALeKk00SbbkQUJagETyjqOt_6nryLQlj9w%3A1584201892313&ei=pABtXt3fEsmLlwTBtLiwCw&q=vitamin+d+lymphoma+hodgkins&oq=vitamin+d+lymphoma+hodgkins&gs_l=psy-ab.3..0i22i30.17163.23764..25671...0.3..0.99.824.9.....0....1..gws-wiz.....0i71.g725PKPWw4k&ved=0ahUKEwjdwaz4q5roAhXJxYUKHUEaDrYQ4dUDCAo&uact=5

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https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6388987/#

INTEGRATIVE ONCOLOGY
Professional
Training Program

CLINICIAN GUIDES

OutSmart Cancer Care Planner

History & Intake Form

CREATE AN ENVIRONMENT WHERE CANCER CANNOT THRIVE

American Institute of Integrative Oncology
RESEARCH & EDUCATION

FOUNDER, DR. NALINI CHILKOV

OutSmart Cancer Care Planner: To Be Completed By Patient

Instructions: Please complete the sections below to the best of your knowledge. You may leave a section blank if you do not have the information requested.

General Information	
Patient Name:	**Date of Birth:**
Cell Phone: **Home Phone:**	**Email:**

Health Care Providers (Names, Institution, Contact Info)	
Primary Care Provider/ Internist:	
Surgeon:	
Radiation Oncologist:	
Medical Oncologist:	Prof. Peyrade Frederic
Integrative Cancer Care Coordinator:	

Other Health Providers: (Acupuncturist, Nutritionist, Naturopathic Doctor, Physical Therapist, Chiropractor, Urologist, Nurse Practitioner, Gynecologist, Psychologist, etc)

Name	**Specialty**	**Location**	**Phone**

Patient Values, Priorities and Concerns

What is most important to you?

To be effectively proactive in limiting the spread of cancer, its reoccurence in the future and help it diminish in size.

Primary concerns and core questions?

The doctors have warned me against plant supplements as it could compromise the effectiveness of chemotherapy

Hopes and dreams?

Resume life as before and achieve set goals which have now been temporarily shelved.

Fears?

Pain,discomfort, not being able to improve my physichal condition and get to top form

Sources of strength and inspiration?

My family, friends and my dog

Sources of inner peace?

My house, my bedroom

Patient Primary Support Network (Family, Friends, Colleagues, Therapists, Clergy, Spiritual Advisors, etc)

Name	**Relationship**	**Phone**	**Email**

Diagnosis

Pathology – Histology: Cancer Type/Location/Histology Subtype	**Diagnosis Date** (year): 2020
☐ ER+ ☐ PR+ ☐ Her2neu+ ☐ Gleason Score Hodgkin Lymphoma	**Recurrence**: ☐ Yes ☑ No
Stage: ☐ I ☑ II ☐ III ☐ Other: ☐ Not applicable	**Grade:** **Ki67:**

Tumor Analysis: Molecular & Genetic Markers (Caris, Foundation One, Other Tumor Profiles)

Radiology: Scans MRIs (Date / Findings / Recurrence?)

Treatment

Surgery ☐ Yes ☒ No	**Year**	**Location**	**Procedure**	**Findings**

Radiation ☐ Yes ☐ No	**Location**	**End Date (year)**
Systemic Therapy ☒ Yes ☐ No (chemo, hormonal, other)	**Agents Used** BEACOPP	**Current OR End Date (year)** 2020

Side Effects – Adverse Effects
Itch, skin redness, nausea, headache, tummy ache, fatigue, loss of appetite, gum/mouth sores, light headed, persistant and localised aches

Current & Persistent Symptoms (Types, Onset, Duration)
Fatigue, body warmth, chills, headache

Complementary, Natural & Alternative Treatments (Check if used prior, "I" if patient wants more information)

	Acupuncture/Chinese Med.		Pain Management		Detoxification		Gluten Free Diet
	Naturopathic Medicine		Meditation		Fasting		Dairy Free Diet
	Nutritional Supplements		Prayer		Enemas		Raw Food Diet
	Herbal Medicine		Yoga		Colonic Therapy		Special Diet – Other
	Homeopathy		Tai Chi		Saunas & Sweating		Massage / Body Work
	Chiropractic		Relaxation / Stress Mng		Vegetarian Diet		Vaccine Therapy
	Physical Therapy		Reiki / Energy Medicine		Vegan Diet	X	Treatment Outside U.S.
	Other:						

Current Prescription & Over the Counter Medications

Medication	**Dose**	**How Often?**
ATOVAQUONE	5ML	1/DAY
METOCLOPRAMIDE	10mg	if nausea
VALACICLOVIR	500mg	1/day
FILGASTRIM	30MU	1/day

	Recreational Drugs / Self-Medication	**How Much?**	**How Often?**
	Tobacco	NA	
	Alcohol	NA	
	Marijuana/THC	NA	
	Sugar	NA	
	Other:		

Familial Cancer Risk Assessment

Family History of Cancer (Relation, Type of Cancer)
paternal grandmother 62 years old, stomach cancer; maternal grandmother 82 years old breast cancer

Genetic counseling: ☐ Yes ☒ No Genetic testing results:

Special Diets - Current

	Avoid Gluten		Avoid Sugar		High Protein Diet		Anti-inflammatory Diet
	Avoid Wheat		Avoid Artificial Sweetener		Low Protein Diet		Detox
	Avoid Corn		Avoid Red Meat		High Fiber Diet		Elimination Diet
	Avoid Dairy		Vegetarian Diet		Low Fiber Diet		Hallal
	Avoid Eggs		Vegan Diet		Raw Food Diet		Kosher
	Avoid Soy		Low Glycemic/Carb Diet		Low Allergen Diet		Other:
	Organic, whole, unprocessed, fresh, chemical-free and hormone-free without artificial colors, flavors or preservatives						

Quality of Life & Long-Term Health

Cancer patients & survivors may experience concerns with the areas listed below. If you have any questions, please let us know so we may guide you to the best resources and support.

	Emotional/Mental Health	x	Fatigue	x	Weight Changes	x	Relationships/Marriage
x	Physical Functioning		Memory Loss/Focus		Financial Assistance		Children/Parenting
	Spirituality	x	Sleep		School/Work	x	Sex & Intimacy
	Mortality / End of Life		Balance/Coordination	x	Fertility		Pain Management
	Stress Management		Anxiety		Digestion/Elimination		Insurance
x	Fear of Recurrence		Nerve Pain		Alternative/Compl Medicine		Other:

A number of lifestyle/behaviors can affect your ongoing health, including the risk for cancer returning or developing another cancer. If you would like support, discuss recommendations with your care providers:

	Tobacco Use/Cessation	x	Diet & Nutrition		Detoxification Programs
	Alcohol/Drug Use	x	Sunscreen/UV Exposure		Meditation / Yoga / Prayer
	Weight Management	x	Physical Activity/Exercise		Sleep, Relaxation & Stress Management

I would also like to discuss:

Is it possible to drink alcohol in between treatments?

Please continue to see your primary care provider for all general health care recommended for your age, including cancer screening tests. Any symptoms should be brought to the attention of your provider:

- Anything that represents a brand new symptom;
- Anything that represents a persistent symptom;
- Anything you are worried about that might be related to the cancer coming back.

OutSmart Cancer Care Planner: To Be Completed By Provider

Co-Morbid or Concurrent Risk Factors & Health Issues

	Insulin Res / Pre-Diabetes		Depression		Dysbiosis		Allergies
	Diabetes, Type:		Anxiety		GERD		Asthma
	Overweight		Mental Illness		SIBO		Food/Gluten Sensitivities
	Heart Disease		Alcoholism		IBS		Sinus Problems
	Unhealthy Cholesterol		Drug Use / Abuse		Gastritis		Toxic Exposures
	High Blood Pressure		Smoking/Tobacco Use		Leaky Gut Syndrome		Heavy Metals
	Blood Clotting/Coagulation		Chronic Fatigue		Sleep Cycle Disorder		Organic Pollutants
	Kidney Disease		Chronic Headaches		Chronic Pain		Mold
	Autoimmune Disease:		Other Addiction(s):		Gastrointestinal-Digestive Disease		Other:

Continuing Treatment Plan

Need for ongoing (adjuvant) treatment for cancer: ☐ Yes ☐ No

Additional Treatment	Planned Duration	Possible Side Effects

Recommendations for Cancer Surveillance, Functional Medicine & Clinical Assessments

	Recommended:	What/When/How Often (Referral Needed?)
	Coagulation-Blood Clotting Factors	
	Blood Sugar Insulin Glycemic Control	
	Thyroid Assessment	
	Hormone Levels- Hormone Metabolism	
	Inflammation Markers	
	Copper, Ceruloplasmin, Zinc	
	Tumor Markers and CTC's	
	Body Mass and Composition	
	Toxic Exposures: Heavy Metals-Mold-Chemicals-Other	
	Intestinal Microbiome	
	Allergy and Sensitivity Testing	
	23andme genome mapping	
	Methylation Factors	
	Genetic-Genomic Analysis	
	Mammogram + Breast US	
	Gynecologic Pelvic Exam PAP	
	Pelvic US, Colposcopy, Endometrial Biopsy	
	PSA Total and Free	
	Colonoscopy	
	Occult Blood Stool	
	Endoscopy	
	Skin Cancer Screening	
	Parasites	
	Evaluate Personal Care Products	
	Evaluate Cookware and Food Storage	
	Other:	

Additional Comments / Case Notes

Prepared by: **Date:**

Thriver Care Plan for Patient: _____ Date: _____

Dietary Guidelines

	Avoid Gluten / Wheat		Avoid Sugar		High Protein Diet		Anti-inflammatory Diet
	Avoid Soy		Avoid Artificial Sweetener		Low Protein Diet		Detox
	Avoid Corn		Avoid Red Meat		High Fiber Diet		Elimination Diet
	Avoid Dairy		Vegetarian Diet		Low Fiber Diet		Raw Food Diet
	Avoid Eggs		Vegan Diet		Low Glycemic/Carb Diet		Low Allergen Diet
	Organic, whole, unprocessed, fresh, chemical-free and hormone-free without artificial colors, flavors or preservatives						
	Other:						
	Other:						
	Other:						

Daily Recommendations

	Protein	
	Fruits (carbs)	
	Grains (carbs)	
	Sweeteners (carbs)	
	Vegetables	
	Healthy Fats & Oils	
	Herbs & Spices	
	Other	
	Additional Healing Foods	
	Avoid	
	Daily Fluid Intake	
	Moderate Exercise	
	Restorative Sleep	

Supplement	w/food	w/o food	B	L	D	Bed	Comments / Instructions

Daily Therapeutic Shake Directions

Digestive Enzymes		
Protein		Total Grams Protein:
Fiber		
Healthy Fats & Oils		
Mix With		
Optional Additions		
Tips		

Rest, Relaxation & Stress Management

Emotional & Spiritual Support

Managing Side Effects

Other

Follow-up Support

Provider / Organization	When/How Often	Contact Information

Quality of Life & Long-Term Health

Possible late- and long-term effects that someone with this type of cancer and treatment may experience:

Additional Resources and Suggestions: (referrals, handouts, audio, video, books, websites, centers, classes, support groups, counseling, retreats, etc.)

Additional Comments:

Prepared by: **Date:**