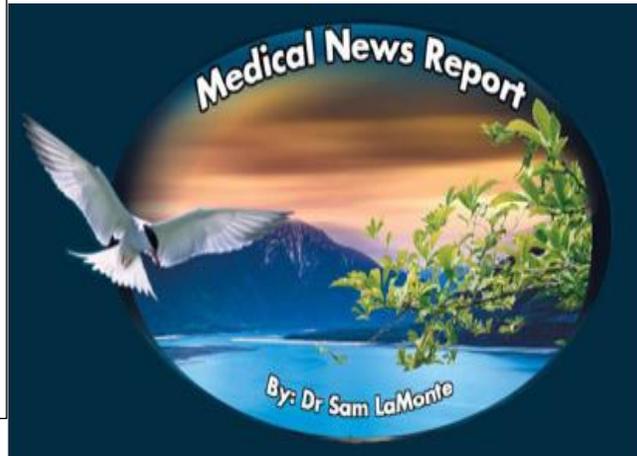


# The Medical News Report, May, 2014



**#28** □

## **Dr. Samuel J. La Monte, M.D., FACS**

**WEBSITE**

[www.themedicalnewsreport.com](http://www.themedicalnewsreport.com)

**In response to those wanting **more links** to information, I am trying to include them at the end of reports. You are still going to have to review previous information covered in my reports. I am in the process of coming up with a **better glossary on the website** for you to see which monthly reports have certain subjects that are multi-month. It will be July before I get it completed.**

**“You think healthcare is expensive....wait ‘til it is free.”—Will Rogers**

**The tree in my backyard in Florida is a trumpet tree (see photo above).**

**Subjects this month:**

## 1. The Future of Medicine—Part 2

## 2. Late breaking medical news in brief

- a. **Glucosamine**-does it really help joint pain?
- b. A new head device to help **migraine headaches**
- c. **Influenza**
- d. What **cancer** has taught me!
- e. **Abdominal aortic aneurysms** and **carotid stenosis**
- f. New device for **high frequency hearing loss**
- g. **Big Pharma, insurance companies, Obamacare Update**
- h. **E-cigarettes**—FDA regulation
- i. **Tamiflu** does not help the flu
- j. **NSAIDS** (arthritis/pain meds) found to have more side effects
- k. **Theater popcorn**---calories

## 3. Final summary on Breast Cancer and the future

## 4. Heart Failure-definition, causes, tests, and treatment-part 1

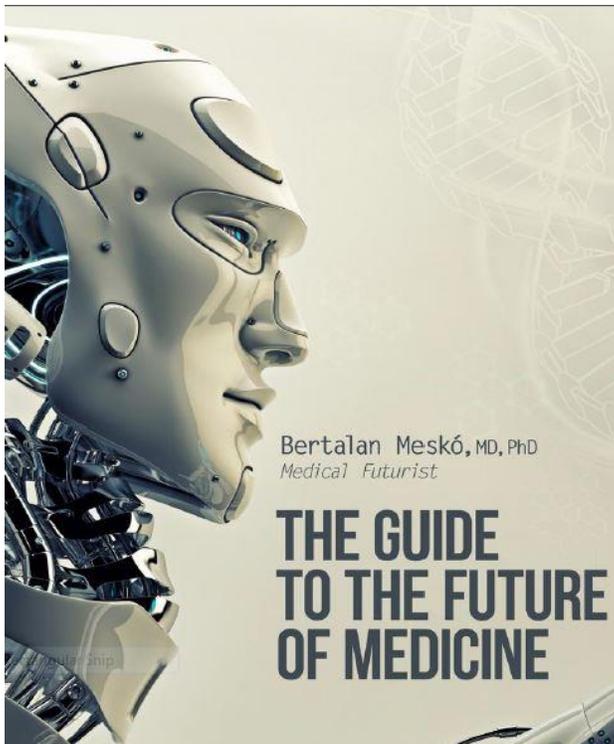
**Kuekenhof**



**Gardens**

## 1. The Future of Medicine—Part 2

**Last month, I reported on 10 aspects of the future of medicine. This month, I will add another 10 (there are over 30 items written about by Dr. Mensko’). Here is another 10:**



**(The first 10 factors were last month)**

### **11. Digital literacy of healthcare providers**

**Doctors and their associates are going to be learning about new technologies to use the future advances in medicine. Access to data, medical information is overwhelming to doctors, and must be at the doctor's immediate access to handle the technical aspects of what is here and what is coming. Robotics at every level down to the cellular level will need to be understood and be practically applied to individual patients. The future of medicine is "individualized medicine" like you have never imagined it.**

### **12. Embedded sensors**

**This was discussed last month, but in the future, these sensors will be in our blood stream, detecting disease as it is happening, thus alerting the patient to get to a doctor before an emergency occurs, like a heart attack or stroke. Sensors will be implanted in teeth to monitor vital signs, artificial organs will be used when an organ quits working. Artificial hearts have been around, and now pancreas, liver, and other organs are coming.**

**13. Evidence based medicine is already here for doctors, but in the future information on the internet will have to prove what it claims, like supplements. Also, this will give more credible knowledge from trusted sites, which is a huge problem today. THAT IS WHY I PRESENT MY MEDICAL NEWS REPORT EACH MONTH, BECAUSE I HAVE NOTHING TO GAIN FROM THIS INFORMATION. ANY OTHER SOURCE VERY LIKELY HAS FINANCIAL MOTIVES FOR TELLING YOU ANYTHING.**

#### **14. Virtual Humans**

**Can you imagine having a full human body that is totally virtual for doctors to learn how to diagnose and treat patients? They will be able to understand reactions to drugs, treatments, etc. in the virtual human body before using it on us.**

#### **15. Medical Gadgets will be wearable**

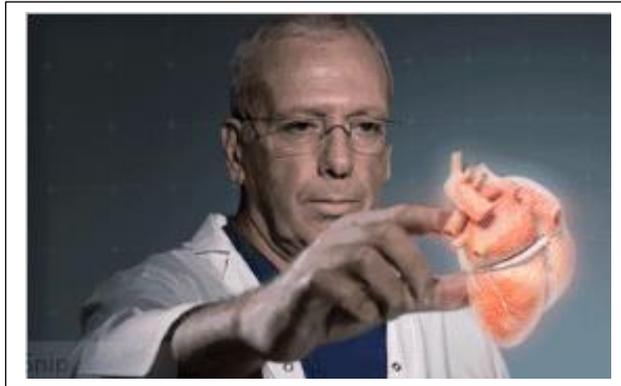
**These medical wrist bands, monitors, etc. will be able to track every activity of your day, from steps taken, calories burned and consumed, blood levels, drugs injected, amount of quality sleep, fitness programs, etc. will be made to act like a game to increase interest in using them. There is already a company that does this. [www.fitbit.com](http://www.fitbit.com)**

**Pick your color!**



### **16. Holographs**

**Have you ever seen Hawaii 5-0, where they display screens on any surface. That will come to every home in the future to monitor your home, watch TV, view medical reports and X-Rays. Holographic keyboards for internet use is already here too.**



### **17. Home diagnostics**

**Sequencing genomes (personal genetics) will be available at home for detection of abnormalities that might increase health risks. There will be an “ON STAR” program right at home for your body to warn you that a blood sugar, for instance, is too high, or that your blood pressure is dangerously high, or when meds should be taken.**

### **18. Humanoid Robots**

**All these shows on TV and movies depicting half human robots and humanoids are really coming.**

**These may be your future primary care doctors, nurses, or baby sitters. There goes the human connection!**

### **19. Using imaging to administer gene therapy for disease.**

**This is already being done to pinpoint treatments in the brain.**



## a. Glucosamine not measuring up!!

Recent studies have determined that glucosamine supplements for knee problem (arthritis, etc.) **do not improve knee symptoms** and even though this chemical is found in knee cartilage and may nourish the cartilage, it does not help pain and stiffness. It is frequently combined with **chondroitin sulfate**, a major chemical in cartilage and is the number one supplement sold for joint health. I know orthopedists that recommend it and previously, there have some studies to suggest that it helps, but well controlled studies have reported mixed results. It is just one example of a supplement that does not measure up in large controlled studies. Discuss this with your doctor. Ref. [www.arthritis.emedtv.com/glucosamine](http://www.arthritis.emedtv.com/glucosamine)

## b. Head device cuts migraine headaches in half



[www.prevention.com/electromagneticheaddevice](http://www.prevention.com/electromagneticheaddevice)

A Belgium company has obtained FDA approval for the first TENS (transcutaneous electrical nerve stimulator) unit for migraine headache relief. The electromagnetic device (Wonder Woman head band) provides continuous nerve stimulation in the middle of the forehead to a branch of the trigeminal nerve and has **reduced the severity of migraines in patients by 50%**. In fact, the study reduced on the average 2 headache days per month compared to no change in the control group. **Botox** has been successfully used to treat migraines, and when I performed cosmetic open or endoscopic forehead lifts, I frequently had

**patients report to me I cured their migraines, since the muscles between the eyes were cut (where branches of these nerves occurred). So it is no surprise to me that electrical stimulation from a TENS unit could help as well. There will be more information as these devices are marketed. The brand name is Cefalgy. Ref. MedPage**

### **c. Many influenza cases are totally asymptomatic**

**20% of unvaccinated Americans have blood tests indicating that they were infected with the Influenza /H1N1/H3N1 viruses (all in the flu shot) and 75% of them had no symptoms of the flu. So, why not realize if you are not one of the lucky ones that didn't have symptoms, why run the risk of being in bed for a week with the flu, and infecting your family and friends. It seems very irresponsible that any intelligent person not get the flu shot annually. There is no sound medical research to prove it causes autism or any other disease in children or adults. An ounce of prevention..... ref. Lancet Medical Journal [www.cdc.org/flu](http://www.cdc.org/flu)**

**You have to put it on your bucket list!**



**Keukenhof Gardens near Amsterdam**

### **d. 15 things cancer taught me!**

**There are many cancer survivor websites, including the cancer survivor's network for the ACS**

**[www.cancer.org/survivorsnetwork](http://www.cancer.org/survivorsnetwork)**

[www.CaringBridge.com](http://www.CaringBridge.com) This is a for families or patients to create a communicating diary on their personal website. As a friend, you can post messages of hope and the family can see what you posted with photos, donations, etc. Another site worth checking out is [www.whatnext.com](http://www.whatnext.com)

Cure magazine [www.curemagazine.com](http://www.curemagazine.com) (for survivors and caregivers—free online and in print). I highly recommend it. I am currently communicating with messages of hope on Caring Bridge with one of my dearest friends who has a brain cancer.

All these sites give current survivors under treatment and families an opportunity to log on to these sites, connect with other survivors with similar cancers, and are clearly a huge support system for these vulnerable and scared people. The American Cancer Society and the National Cancer Institute have helplines that allow survivors and or families to talk directly with a specialist in cancer. I have visited the ACS call center in Austin, Texas, and I have never met more passionate, helpful, and motivated people. **1-800-ACS-2345** 24 hours a day.

[www.WhatNext.com](http://www.WhatNext.com) offered 15 things that survivors have learned going forward. I am a cancer survivor (since 1992), and I was very fortunate to have been cured. Having volunteered at all levels for the ACS (over 35 years) has allowed me to give back. As you know, I am working on screening guidelines and survivorship guidelines for primary care with the national ACS currently. I have helped many individuals get through their experience, not to mention being a head and neck cancer surgeon for 30 years. Reach out to these helping hands.

**15 things cancer has taught me:**

- 1. It is important to live life with no regrets.**
- 2. It showed me what real friendship**
- 3. How to open myself up to the kindness of others.**
- 4. How to have grace and empathy for all people.**
- 5. How I could be a part of a meaningful online community.**

- 6. Not to take things or people for granted.**
- 7. Not to sweat the small stuff.**
- 8. How to treat my body well.**
- 9. How to lean on others.**
- 10. How to be angry about my disease and use that energy to  
Fight it!**
- 11. I am much more courageous and so are others**
- 12. It taught me about faith.**
  
- 13. It showed me my many blessings.**



- 14. That I could advocate for my family. My family needs me as much as I need them.**
  
- 15. That I could move forward regardless of the prognosis. I am a fighter, and cancer will never win. It can take my body but not my soul.**
  
- 16. That I could live each day like it was my last. I have been blessed to have had so many people in my life.**

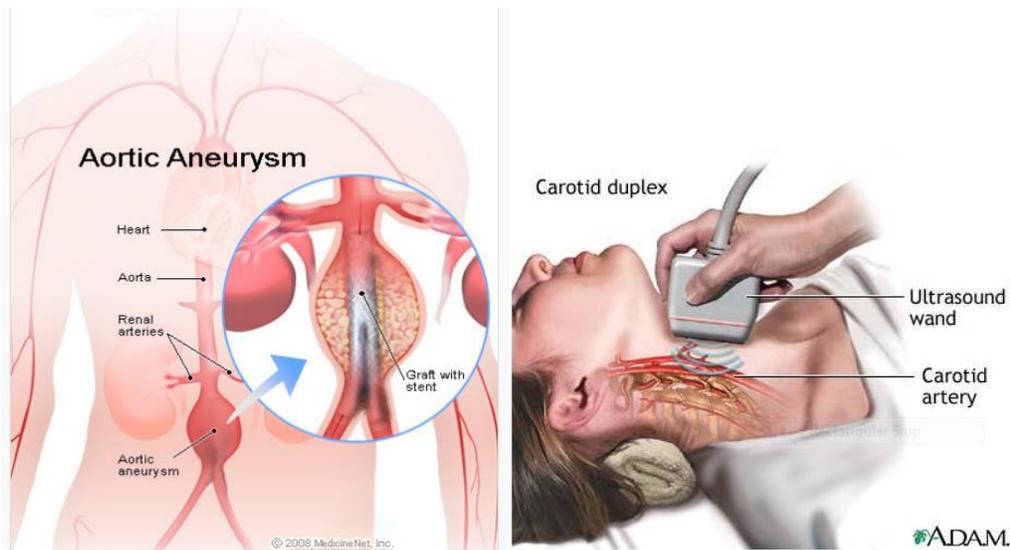
## **e. Screening for abdominal aortic aneurysm and carotid stenosis**

**Screening for abdominal aortic aneurysms has been recommended for men, who are smokers and are from age 65-75 one time only. It is not recommended for women in the general population nor is general population screening for carotid stenosis. These recommendations come from the federal task force that advises the federal government for health screening (USPTF). An article in the New England Journal of Medicine has reviewed 4 studies and the authors have not changed its recommendations, which will be officially announced to the public soon.**

**Aneurysms, regardless of position, before they rupture do not cause symptoms, and therefore, when they rupture they are catastrophic. They occur in the brain, the aorta in the chest and the abdomen, but can occur in any artery. Women are 6 times less likely to have them. Smoking is the greatest risk factor besides a hereditary predisposition. Vascular disease in general is also a lesser factor.**

**Once found, they must be followed until certain parameters are met to make them a candidate for surgery. The surgery is major, and has even been performed endoscopically.**

**Abdominal aneurysms can be felt if the abdomen is palpated deeply. They may have noises in them (bruits) from partial dissection (separation of the wall).**



**The diagram on the left shows an aneurysm which is treated with a vein graft and stent in place. The aneurysm is actually bypassed. This is the typical way these large arterial aneurysms are handled without actually removing the defect.**

**The diagram to the right shows an **ultrasound** of the carotid artery. Screening ultrasound for aneurysms and carotid artery stenosis are common place, but the USPTF (the federal task force) does not recommend screening the general population. **The percentage of Americans having a major aneurysm is less than 1% of the general population.** I lost a partner in my clinic from this, who was a heart surgeon who smoked heavily.**

**There are **Screening Fairs** that come to cities and communities doing screening for one small price. This is a great service to a community. As always, check with your doctor about the advisability of any random general screening test. If over 50, diabetic, have heart disease or kidney disease, are a smoker, have hypertension, high lipids in your blood, etc., a person might consider scheduling these ultrasounds. Your doctor should examine you with a stethoscope to listen to your neck and abdomen and palpate for masses (an aneurysm might feel like a mass). A screening ultrasound should then be recommended if a bruit or bulge was found. Reference:**

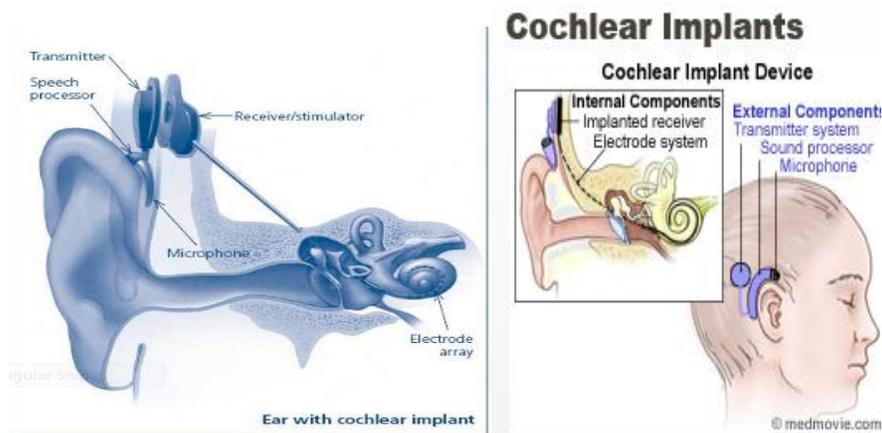
[www.lifeline.com/ultrasoundscreening](http://www.lifeline.com/ultrasoundscreening)

## **f. Help for patients with high frequency hearing loss!**

**Millions of Americans suffer from ringing in their ears and high frequency hearing loss. Ringing in the ears is the most common symptom. To date, a hearing aid has not really helped these patients, because these high frequencies are above the speech range for hearing. It interferes greatly when there is other noise in the room. Now there is new **FDA approved surgical procedure (an inner ear implant)** and a special hearing aid.**

The Nucleus Hybrid L24 Cochlear Implant System combines the functions of a cochlear implant and a hearing aid. This electronic device consists of an external microphone and speech processor that picks up sounds from the environment and converts them into electrical impulses. The impulses are transmitted to the cochlea through a small bundle of implanted electrodes, creating a sense of sound that the user learns to associate with the mid- and high-frequency sounds they remember. The hearing aid portion of the device is inserted into the outer ear canal like a conventional hearing aid, and can amplify sounds in the low-frequency range.

**The transmitter is implanted in the skull and the electrode implant is wired to the inside of the ear. [www.hearingloss.com](http://www.hearingloss.com)**



**g. Big Pharma, insurance companies continue sticking it to the public; Obamacare update**

**Glaxo-Smith-Kline Pharmaceuticals**, as other pharmaceutical companies have done, has won an injunction to prevent a generic company from making and selling Advair, a very common asthma medicine, whose patent has run out. Why courts are letting them get away with this is beyond me. The first 1-2 years after a generic company starts selling a drug, the brand pharmaceutical company is allowed to get a cut of the profit, and therefore the price is still very high. This happened to LIPITOR. I have already reported on companies getting fined for paying generic companies not to produce generics.

The insurance companies, the hospitals, and Big Pharma are all out to make as much money as they can and the feds either look the other way (LOBBYISTS) or condone their actions. I guess this is the down side of capitalism. It may be the reason that the socialists are winning favor with more liberals. We can't have it both ways. Most moderates and conservatives want less government but then, when we want government to step in, we talk out of the other side of our mouths. It is a balance that most of us want, but trying to achieve it with 2 polarized political parties, is impossible.

**Obamacare has brought insurance to 5.4 million Americans that were previously uninsured according to the ACA (not 8 MILLION),** The rest of these insurees are those that lost their insurance because their plan did not comply with Obamacare law. Thousands lost the plan they liked, and they are paying for benefits they don't want (birth control, etc.). This drops the percentage of uninsured from 17.3% to 15.7%. So if Obama says that 8 million Americans signed up, that includes over 2 million that had to change their insurance plans for various reasons. According to Blue Cross 80-85% of those insured have made a payment, and other insurance companies have said the same. Obama has given an exemption to small business 'til 2015, because they would have dropped thousands of their employees. The employers will not be penalized for not providing insurance for their employees (below 50 employees) until 2016. The big problem is that 44million Americans are still not insured. Even in 10 years, it is estimated that 30 million Americans will be uninsured.

**Insurance companies across the board are expected to raise rates 7-10% in 2015, and in states, some even higher.**

**The good news is, many with **pre-existing illnesses** now have insurance, and many have found **policies that are less expensive** than what they had, but the bad news is so many poor people still can't afford the premiums, deductibles and co-pays. Many are paying more than before and have higher deductibles co-pays. It will be interesting when Sebellius, having resigned, starts spilling her guts after Obama is gone. Losing preferred doctors and hospitals is pretty common. **20% have not paid their premiums yet (Obama will not say), and now doctors are told they have to treat these patients for 90 days before they can even find out if their insurance company is going to pay, since many won't be able to fork over thousands for their deductible. As a business man, this healthcare plan would not get to first base if in the private sector.****

**The sad news is, it will take years for us to realize this plan is not working and is WAY TOO EXPENSIVE. Can you say "socialized medicine"?**

**Ref. Reform Monitor Survey on Medscape**



"The tobacco epidemic was initiated and has been sustained by the tobacco industry, which deliberately misled the public about the risks of smoking cigarettes." – The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General

**Look familiar?**



**h. Electronic cigarettes DO NOT help people quit smoking! Addicting young people to nicotine? Another tobacco industry conspiracy?**

**Studies in Europe and the US have concluded that e-cigarettes do not assist smokers in quitting. 85% of those who started smoking**

**e-cigarettes intended to quit, but the percentage of those able to wean off the e-cigarettes were no more successful in helping smokers quit than nicotine patches—6=7%. With aggressive marketing of e-cigarettes as a quit smoking gadget, people must depend on themselves to decide they would rather live longer without smoking. The act of smoking itself is addicting psychologically and can lead to people starting to smoke cigarettes, especially the young. JAMA-Internal Medicine 2014**

**There is also a **very serious issue** coming to the surface with young people purchasing e-cigarette cartridges full of liquid nicotine, emptying the cartridge and adding it to energy drinks to get a high from nicotine and caffeine. It will not be long before there are reported deaths. Hospitalizations are already being reported. Discourage anyone, especially the young, to use e-cigarettes, as the tobacco industry has just found a way to use nicotine to get people hooked on cigarettes. As a trial for an adult smoker, it is an option. Studies are ongoing.**

**I went to a mall recently, and a huge kiosk was present selling e-cigarettes with 50 bottles of flavored liquids to be added to the nicotine liquid. Did this liquid contain any caffeine or other stimulants like 5 hour energy? UGH!!! It is appealing to the young. This may be the biggest boon to the tobacco company in decades to addict youngsters to nicotine using e cigarettes as a gateway to cigarettes.**

**In 2010, the Supreme Court struck down the ability of the FDA to regulate tobacco. However, the FDA, just 2 weeks ago issued a restriction on selling e-cigarettes to minors (less than 18). “Vaping” is the slang for puffing on a device like e-cigarettes or hookahs. Those establishments are also prohibited from allowing minors from entering.**

**Another study clearly shows that smoking cigarettes is a lower class habit. 1 in 10 higher class Americans smoke and 1 in 4 poor people smoke!!! Don't be low class!**

## **i. Tamiflu and Relenza do not improve or shorten symptoms from the flu**

**The claims for the neuramidase inhibitors, Tamiflu and Relenza, do not shorten or reduce symptoms of influenza, according to the British Medical Journal. These prescription items, if taken within the first sign of symptoms, these meds were supposedly valuable in preventing more serious side effects of influenza, such as pneumonia, and symptoms of the flu, such as nausea and vomiting, muscle ache and fever. This large study sheds a significant doubt they are worth taking. Flu is winding down, but this study is very credible. Talk to your doctor. I suspect the insurance companies will soon not cover these two drugs. Get your flu shot this fall.**

## **j. NSAIDS (non-steroidal anti-inflammatory drugs--arthritis meds cause increase risk of atrial fibrillation**

**Arthritis meds (Aleve, Ibuprofen, Celebrex, etc.) are anti-inflammatory meds and are some of the most common OTC and prescription medicine taken. (Tylenol is not anti-inflammatory) There have been many reports about COX-2 inhibitors (a specific group of anti-inflammatory meds - (i.e. Celebrex) creating hypertension, and cardiac abnormalities. Vioxx, another Cox-2 inhibitor drug, was taken off the market. A new study from the British Journal of Medicine reported a 76% increase risk of atrial fibrillation in the first month of taking these meds daily. This large study did not name any specific NSAID drug, but reported that all of them increase risk.**

**I have reported on atrial fibrillation in previous reports, one of the most common forms of arrhythmias (irregular heart beat). It is best to check with your doctor before starting to take these meds on a daily basis, even if a medication is over the counter.**

**k. How many calories are contained in a large sack of popcorn with buttery topping at the movie theater??**

**You can eat 2 large pieces of fried chicken, a small cup of mashed potatoes, and a can of soda. 1275 calories!! Wow, I guess I will have to skip dinner. WebMD**

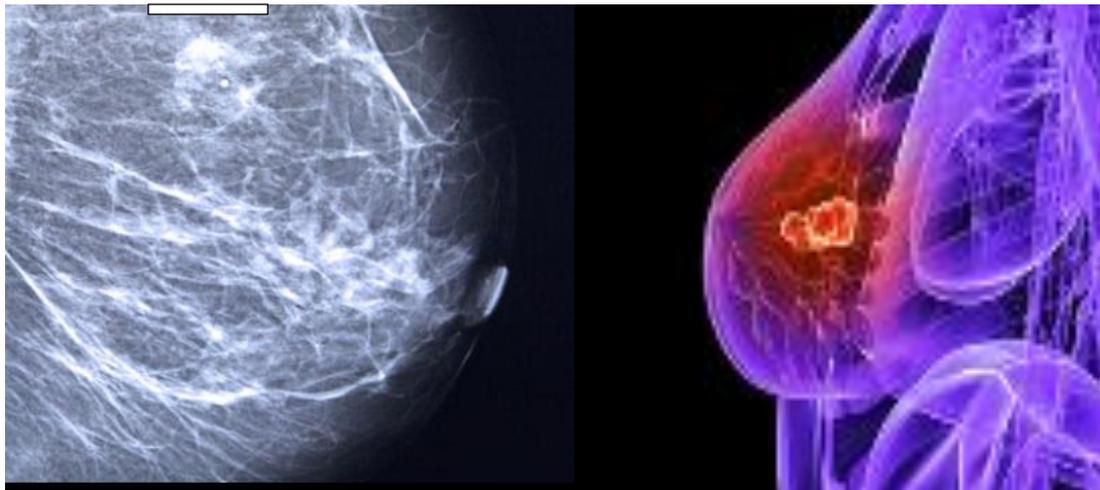
### **3. A Summary of Breast Cancer including results of treatment and 5 year survival rates**



**I have given my readers so much information about breast cancer, that it is appropriate to summarize my reports on breast cancer. There is nothing about cancer that is simple. With that, I would suggest you always get a **second opinion** about cancer treatment. Strongly consider going to an **American College of Surgeons approved cancer center**. This is a serious designation!! The complexity and biases are out there, so you must understand what your doctors are recommending, AND I WOULD BE SURE YOUR CASE IS PRESENTED TO A TUMOR BOARD FOR EXPERT OPINIONS FROM A PANEL OF EXPERTS, NOT JUST ONE SURGEON OR ONCOLOGIST. THIS IS STANDARD IN CANCER CENTERS. IT PREVENTS PERSONAL BIAS. If a clinical trial is recommended, it must be understood that the trial is using cutting edge new drugs that have yet to be approved for general use, but may be**

**showing more promise than the standards of care. Side effects, consequences, and time to decide if the new drug is working are all factors in considering whether to enroll in a **clinical trial**. Who is paying is very important too. Cancer can still bankrupt you even with the best insurance plan. Do your homework.**

**Breast cancer is the second leading cause of death in women. Survival rate does not mean cure rate, therefore, if a patient is living with disease at 5 years the survivor is placed in that statistic. 10 year survival rates are not as promising, since it is not uncommon for breast cancer patients to live 5-10 years because of the advances in treatment of metastatic breast cancer. Most importantly, statistics are drawn from large numbers of patients, and the rate may or may not apply to individuals. The survival rates are seen below.**



**The above mammogram on the left shows a tumor in the upper field of the mammogram. The right photo is a MRI with colorization of the tumor.**

**Over the past several months, I have discussed **mammography** screening, incidence and symptoms of breast cancer, types, localized and those that spread to lymph nodes, and where they may metastasize. There is hope for all patients. The diagnostic testing for patients, including genetic and biological markers, was discussed. I have discussed BRCA genetic mutations and options for prevention if a woman finds out that have this genetic mutation, like Angelina Jolie.**

**Factors for rates of success in treating breast cancer are:**

- 1. Location and spread (localized 98% success, spread to lymph nodes 84%)**
- 2. Tumor evidence of estrogen and/or progesterone activity in the tumor (75% of all tumors are in this group and is a favorable factor and have the best prognosis).**
- 3. Tumor markers—HER2 positive in tumor biopsy (human epidermal growth receptor); these are in younger patients and indicate a more aggressive tumor. This is present in 20% of patients.**
- 4. Gene expression—BRCA gene mutation—these imply high chances of breast cancers, but only 2-5% of breast cancer patients have the mutation. If the BRCA gene mutation is known because of a heavy family history, there is as much as an 85% chance of developing breast cancer and 40% chance of ovarian cancer. Therefore, more aggressive measures are indicated from **close surveillance to removal of both breast and ovaries**, including chemoprevention. A recent study even notes there is a increased risk for a very invasive type of uterine cancer in BRCA patients.**
- 5. Tumor size will determine the stage as well as nodal or distant spread.**
- 6. There has been a **25% decline in death rates since 1990**, in part from mammography, but also because of great advances in treatment. **Screening mammography alone is associated with a 19% overall reduction in deaths (32% in women in their 60s). There is no evidence for women over 75 getting****

**mammograms unless they have risk factors. It is always a **decision between the woman and her doctor.****

- 7. There are tumors that are called **triple negative** and indicate a harder to treat cancer, because they do not have estrogen, progesterone, or HER2 protein markers in the cancer cell. In general, this type of tumor has approximately 20% less overall survival than the other breast cancers.**
- 8. **Recurrence and second breast cancers** usually occur within 5 years from the time of diagnosis. A cure is still possible.**

**There are other risk factors that have to be considered, such as, **age** (younger women have more aggressive tumors), age of **first menstrual period**, pre vs. post-**menopausal status**, and always the **overall health status** of each patient, their willingness to follow the doctor's recommendations for treatment, nutritional, activity, and psychological support status. All these factors play a role in the success of treatment.**

**The **bottom line** is early **diagnosis equals better cure rates**, and localized small cancers without spread give a woman a 98% of cure. Spread to nodes drops the overall rate to 84%. And if a tumor has spread to other organs, the overall 5 year survival rate is 22%.**

**Staging of breast cancer** is of utmost importance and guides the treatment which can include chemotherapy before or after surgery with radiation before or after.

**I am currently working on breast cancer guidelines and revised screening for mammography with ACS. The American Cancer Society will have new information out on survivorship guidelines and new screening recommendations hopefully by the end of this year. Please refer to my medical news report website for in-depth discussion on breast cancer, under archives [www.themedicalnewsreport.com](http://www.themedicalnewsreport.com)**

**Here are the **5 year survival rates for all breast cancers:****

**It is pretty obvious that early detection equals better cure rates.**

**Stage 0—100% 5 year survival rate**

**Stage I---100%**

**Stage II—93%**

**Stage III—72%**

**Stage IV—22%**

**More information:**

**1. Recurrence is not a death sentence. There is still great hope, and new drugs are available for these patients. Many of these patients can be controlled if not cured.**

**2. Another late breaking bit of information about dense breasts. Increased screening with no other risk factors does not increase survival. If there is a positive history for breast cancer or other risk factors, this requires closer monitoring perhaps with more advanced tests, genetic testing, etc. Dense breasts are better screened with digital mammography or regular mammography plus an ultrasound. Dense breasts are harder to diagnose early cancers, and therefore the cure rates are not as good.**

**3. The future of breast cancer research looks very promising, and many new drugs are being evaluated and could really affect all phases of breast cancer treatment. There is even a Canadian study just reported that the bacteria in normal breast tissue differs from breast cancer tissue. Lactobacilli and Bifidobacteria were prevalent in the normal breast tissue, which is commonly found in breast milk and is 2 of the normal bacteria recommended in probiotics. Breast cancer tissue had predominantly E. coli and other Bacilli in them. E.coli is known to be carcinogenic. How this will play out as we discover more about our microbiome and how it affects cancer and other diseases, remains to be worked out.**

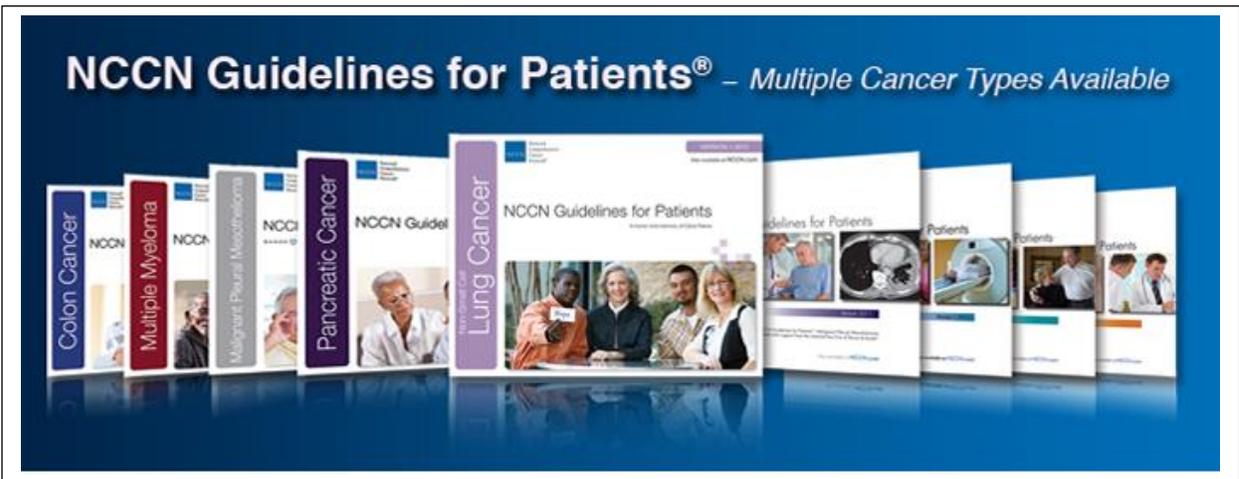
**4. The future of breast cancer lies in better detection, selective treatments based on genetics, and new preventative breakthroughs. Research has estimated that half of all breast cancers can be prevented with good life style behavior (less alcohol, ideal weight, daily physical activity, and not taking dual**

**hormonal (estrogen/progesterone) replacement therapy for menopause. Chemoprevention in genetic mutation patients (BRCA) will decrease their chances of developing breast and ovarian by 50%. Ref. CDC, American Journal of Surgery, American Society of Clinical Oncology, American Cancer Society**

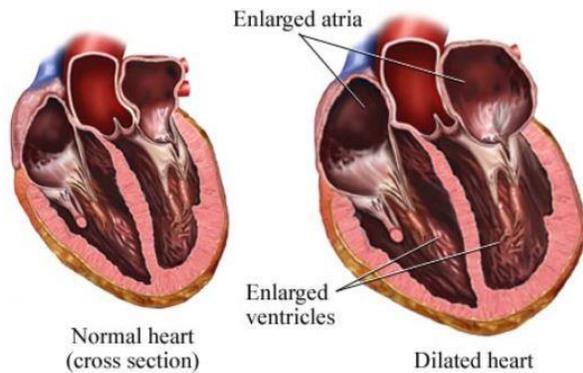


**The National Cancer Network (NCCN) is the “Holy Grail” of information. It is free. The guidelines for each cancer site are available online on hard copy by logging on to**

**[www.nccn.org/guidelinesforpatients](http://www.nccn.org/guidelinesforpatients)**



#### **4. Heart failure-definition, causes, tests and treatment —Part 1**



**a. Heart failure, often called **congestive heart failure**, is defined as a lack of the pumping capability of the heart muscle. This is a result of numerous factors that cause the heart muscle to “fail”. Partial failure is what I am speaking about, since actual failure would imply pulmonary edema and even death. When the heart muscle begins to fail, the wall of the heart thickens and enlarges. The pump can’t push the blood fast enough, fluid builds up in the lungs (left sided failure) and edema accumulate in the liver, abdominal cavity, and legs (right sided failure).**

**b. Causes of failure**

**--**coronary artery disease** is the most common cause of the heart failing. The mechanism is created by a blockage of a coronary artery, which causes ischemia to a part of the heart muscle, which makes the pump work less effectively. This will cause angina and ultimately failure. This happens over time with continuing blockage of a heart vessel especially when 2-4 vessels are involved. This is the most preventable cause outside of hypertension. I have reported on coronary artery disease extensively in previous reports and hypertension.**

**--**hypertension** is also a very common cause, especially when the disease goes untreated. The pressure that happens with systolic and diastolic pressures makes the heart pump against that pressure getting the blood out of the heart. This is a very treatable and preventable cause.**

--**faulty heart valves** occur from a variety of causes. Congenital abnormalities, damage to a valve from infection (**endocarditis**) can cause the valve to malfunction. The valve can leak blood back into the heart (insufficiency) or because there is narrowing (stenosis) so that the heart has trouble getting the blood through the valve out to the body.

--**cardiomyopathy** is a term that there is actual pathology in the heart muscle from viruses, alcohol, illicit drugs, emphysema, and toxic effects of drugs (cancer drugs), deposition of abnormal substances in the muscle (amyloid, hemochromatosis-iron overload, thyroid disease), allergic reactions, autoimmune disease—lupus, rheumatoid disease, etc.), and pulmonary emboli.

--**myocarditis** is a term to imply infection in the heart muscle from viruses, bacteria, and even parasitic disease. These infections create a very flabby heart muscle and can cause severe heart failure.

### c. Symptoms

The **most common symptoms** are shortness of breath and accumulation of fluid in the feet and legs, and in the abdomen (ascites). Fatigue, weakness, irregular heartbeats or palpitations, increased urination at night, and cough. Chest pain would indicate coronary artery disease, wheezing and spitting up pink (blood) phlegm would indicate more severe failure; decreased concentration, and headache from hypertension. If these occur suddenly, it should alarm any patient and medical attention should be sought immediately.

d. **Other Risk Factors** are previous heart attacks, advanced coronary artery disease, diabetes, some drugs, sleep apnea, congenital heart defects, viruses, excessive alcohol intake, and arrhythmias.

**Next month**, I will report on complications, testing for heart failure, classifications of heart failure, and

**treatment options. As you can see this abnormality is the result of many diseases, so it should usually be thought of as a result of disease. Ref. CDC, AHA, WebMD, Wikipedia**

**This completes this month's Medical News Report. Sorry for the length. Thanks to those who responded to my questionnaire. Many of you requested I report all at once on a particular subject. I will be able to do that except when the subject is too large. I will try and balance the subjects for men and women. I know some of these subjects are more appealing than others. You may request any subject you desire. We will never run out of new information.**

**Stay healthy and well my friends. Dr. Sam**

