Is Ionic Silver Destined to Save Hundreds of Millions From Disease?

It will reach the world quickly or slowly depending on the financial interests that prevail

By Jay Newman (August 21, 2013)

“Silver makes antibiotics thousands of times more effective.” That was the headline of a scientific article published in *Nature* on June 19, 2013.[1] *Nature* is one of the highest impact scientific publications in the world.

In anybody’s book, that’s a pretty heavy-duty headline. While many people who are into silver as an investment and as an intriguing form of money are already aware of the medical potential of silver, this is clearly big news.

Yet, as big as those headlines are, there’s a lot more to the story.

On one hand, the news marks a significant leap forward towards the use of silver as an antimicrobial agent by the pharmaceutical industry.

On the other hand, though, this is just one piece of a much bigger story about the ability of silver to fight infection, since it’s been known for quite a while that ionic silver is unequaled at fighting infection and doing so with few or none of the side effects of antibiotics. It’s been out there as a not-so-hidden secret for a long time. The technology, and its proven track record, has been evolving much faster than big business has been able to figure out ways to make huge money on it. And therein lies the real story.

This recent study will be accelerating the pace at which companies scramble to find ways to capitalize on ionic silver – which is the only bioactive form of silver and was therefore the form used in that study.

The research article itself on the study in question was published in *Science Translational Medicine*, one of the most respected scientific publications in the world.[2] According to Robert Petersen, PhD, Associate Professor of Pathology at Case Western Reserve University, “This takes silver out of the realm of alternative medicine with anecdotal evidence and places it squarely in the realm of legitimate, respected science.”

Dr. Petersen goes on to say, “For the first time, the researchers have clearly spelled out the mechanism of action by which ionic silver kills bacteria.”

It’s quite noteworthy that the researchers pointed out two distinctly separate actions by which the silver ions killed bacteria. One was by making the bacteria more permeable and thus more susceptible to antibiotics – hence the title of the story in *Nature*. The second was by acting directly to kill the bacteria even in the absence of any antibiotics.

One has to wonder why that latter aspect wasn’t emphasized more. One can easily answer it, though. It’s about money. Indeed, the researchers have patent applications filed for the combination of silver ions with antibiotics for treatment purposes. That’s how the medical field works. That’s how the world of Big Pharma works. Without patents, there’s no incentive to jump through the exorbitantly expensive and complex hoops required to obtain drug approval.

And without drug approval – at least in the United States, Europe, and most of the modern world – the company that sells the product is not allowed to mention to the public anything about the potential health benefits of the product if those benefits have anything whatsoever to do with preventing or treating any “disease.”

**So What Is Ionic Silver Anyway?**

Most people can visualize that an atom, in an overly simplistic sense, resembles the solar system. There’s the nucleus in the center, like the sun, and all these electrons spinning around it, like the planets. In an ordinary atom, which is what makes up most of the elements in our world, there’s a perfect balance between the nucleus and the number of electrons spinning around it. If, however, you remove an electron, which could be compared to removing a planet from our symbolic solar system, you now have something that’s very different indeed.
In the case of silver, what makes up the metal is normal atoms. This is what makes up silver jewelry and just about everything else you see that’s made of silver. When you remove an electron from a silver atom, however, you create a silver ion – also called ionic silver – which has very different properties than atoms that comprise the metal. This is the form of silver that provides all the bioactive benefits associated with silver.

Silver ions are extremely bioactive and also extremely unstable. They will always seek out a partner to fill that missing electron position. What that partner is will dramatically impact how that silver ion behaves.

(More on this below.)
U.S. Drug Law and its Connection to Profitability

In the United States, “disease” is anything the Government has added to its official list. Until a few years ago, anxiety was just something people experienced. Now, it’s an official disease – and as of that moment no company has been allowed to mention in marketing that their products might help with anxiety. Until then, you could sell nutritional supplements and make the connection. Now, it’s illegal to do that without prior drug approval.

Manufacturers only seek drug approval when the substances are patented. This usually means nature has never seen it, but not always. Sometimes an isolated ingredient or improved delivery mechanism for a substance that’s still in the “natural substance” category can result in patent protection. What is for sure, though, is that without patents, and thus a monopoly, no company ever invests in the costs of obtaining drug approval in the U.S., which means no company can inform the public that the product might help with a disease.

This has posed quite a dilemma where ionic silver is concerned. After all, silver has been around in various forms for well over a thousand years, and while news about its antimicrobial benefits has spread over the years, no company is currently allowed to actually market any silver product for internal human use with even a hint of a suggestion that it can fight germs or do anything to help with disease. At most, they can say it supports the immune system.

Ionic Silver’s Credentials

The article in Nature had this as the subtitle: “Ancient antimicrobial treatment could help to solve modern bacterial resistance.” Ancient is obviously a hint that it’s not all that new.

The results of a study conducted at Rice University in Texas were published July 11, 2012 by R&D Magazine, with the title “Ions, not particles, make silver toxic to bacteria.”[3] The study was conducted in an effort to settle the debate over whether nanoparticles of silver are antimicrobial or whether, as the researchers concluded, it’s only the silver ions released from the nanoparticles that kill bacteria.

The story in R&D Magazine states, “Scientists have long known that silver ions, which flow from nanoparticles when oxidized, are deadly to bacteria. Silver nanoparticles are used just about everywhere, including in cosmetics, socks, food containers, detergents, sprays and a wide range of other products to stop the spread of germs.”

(Make a mental note of that last sentence – that says silver is used just about everywhere. We’re going to come back to that in clearly making our point that profit is what will determine how soon we can start to save hundreds of millions of people from disease by utilizing the germ-killing properties of silver ions.)

In 2008, Applied and Environmental Microbiology published a research article entitled “Antibacterial Activity and Mechanism of Action of the Silver Ion in Staphylococcus aureus and Escherichia coli.”[4]

We can go on and on, but the point is clear. Silver ions kill germs; that’s been very well established.

So why don’t we hear about the utility of silver in mainstream news every day? Well, in the U.S. it’s because of the Food and Drug Administration and what some people call “censorship” of anything that hasn’t gone through the hoops required to obtain permission to share information with the public. You’d like to think that in today’s world the public has the ability to quickly educate itself on just about anything it wants, but the FDA says you’re not smart enough to decide what is or is not good for you, so it prohibits companies from suggesting that their product might help a disease unless they were first granted that approval by the FDA. This usually costs tens and often hundreds of millions of dollars and takes years.

And no company spends that kind of money unless, a) they have it, and b) they can profit from it.

Without FDA drug approval, there will be no lifting of the “statutory” censorship.

Oh, the information can be discussed in the news and in articles and studies, but nobody making or selling silver products can suggest that those products might be able to help fight a disease. The public has to get it second-hand somehow, not from anyone with a product to sell you.
Disease as a Business

But what of the free enterprise system? Isn’t it supposed to enable the best to rise to the top? Well, in this case, as in most cases, it helps the man with the gold make the rules. The influence of Big Pharma on the FDA is massive (as well as on the Federal Trade Commission, which often partners with the FDA in enforcing this censorship on the potential benefits of natural products – if the FDA hasn’t approved it as a drug then any claim made about potentially helping to fight disease is regarded as being “false and misleading” by default). The Government helps protect the interests of Big Pharma while keeping natural products in the shadows, preventing the public from learning about the ways natural products can help prevent and treat disease. The deck is stacked against natural products. Who can afford to invest in studies to “prove” things when they know they can’t use the result of those studies in their advertising unless they have patents and the resultant monopoly that justifies investing a king’s ransom? And so it goes.

The way the FDA regulations end up working is that makers of “natural” products are almost completely excluded from making disease claims while patented substances created in the lab by Big Pharma are “made to order” for the drug approval process. But how do you patent a natural substance like silver – or, more specifically, silver ions – in order to make the big bucks on it?

So, we’ve had these dual realities going on. On one hand, it’s well known by experts that ionic silver has all these qualities. On the other hand, the information is largely censored while Big Pharma wrestles to find a way to make the big bucks on it – and looks for a way to continue profiting from the antibiotic market.

Antibiotics are, in and of themselves, one of the biggest threats to the welfare of mankind on the planet today.

MRSA (pronounced MER-suh) is Methicillin-resistant Staphylococcus Aureus. VRE is Vancomycin-resistant Enterococcus. These are very common, very deadly pathogens that didn’t exist until the over-use of antibiotics caused them to develop. In both cases, the strain of super-bug is actually named after the antibiotics that caused them and that simply do not work against them.

These super-bugs evolved due to natural mutation and the tendency of bacteria to adapt to survive under adverse conditions – a scenario that is very problematic with antibiotics. While the possibility exists for this to occur with ionic silver as well, the likelihood is far less with silver than with antibiotics. According to Philip M. Tierno, PhD, Professor of Clinical Microbiology and Pathology at New York University Medical Center and author of The Secret Life of Germs (Atria Books 2004), "Silver is a natural antibacterial that fights germs with much less fear of developing resistance."[5]

"Antibiotics Resistance 'as Big a Risk as Terrorism' - Medical Chief" is the title of an article published by BBC News on March 11, 2013.[6]

It’s not just the use of antibiotics for infection, but the fact that by now antibiotics are in the food and water supplies worldwide. Yet, the push to market more antibiotics seems to be inevitable. The profit to be gained is far too great.

I want to point out here that, obviously government agencies like the FDA and FTC are not like the Borg on Star Trek – they’re not comprised of a single, unified, collective mind. Many good people work at those agencies. The same goes for pharmaceutical companies. The problems lie in the mixing of government regulations with healthcare, and with the obscene level of influence the pharmaceutical industry has on government. Many people in the system are decent, well-intentioned people, with no idea about the sinister motivations and actions that corporate greed leads to, and how it pollutes and perverts the systems they work in.

Pharmaceutical companies are publicly traded companies whose legal duty it is to pursue profits above all else, as long as it’s within the law. It’s the fiduciary responsibility of the people in charge to pursue more profits for the shareholders, which means more sales of their products, larger market share and a larger customer base. It means sell more drugs. It means influence government and the school system to your profit-driven ends. Nowhere does any of that jibe with seeing the public healthier and in less need of medicine. It’s about profit, and quite unapologetically so.
This is not helping the health of the people of planet Earth at all. The problem of antibiotics continues. And it’s not new. This is a massive problem that the world needs to deal with on numerous levels.

A December 2009 report in the medical journal *The Lancet* was entitled, “Urgently Needed: New Antibiotics.”[7] The report stated the following:

> “WHO has identified antibiotic resistance as one of the greatest threats to human health. Yet prospects for replacing current antimicrobial drugs are poor.”

In April 2010, the Infectious Disease Society of America went even further. It put out an urgent call for the leaders of the world to address this issue, and for the medical field to develop “10 new anti-infective drugs by 2020.”[8] The report began with the following:

> “The time has come for a global commitment to develop new antibacterial drugs. Current data document the impending disaster due to the confluence of decreasing investment in antibacterial drug research and development concomitant with the documented rapid increase in the level of resistance to currently licensed drugs.”

The pharmaceutical industry responded by saying there’s not enough profit in it for them to do that, and that they’re focused on more profitable areas like medications for cholesterol and anxiety. And the world essentially just said, “Okay, we understand.” That’s the bizarre world we have accepted. In fact, Big Pharma asked governments to subsidize the effort, even though only the Pharma companies would profit on the resultant sales! And without that footing of the bill it isn’t happening. The profit gains aren’t worth it.

If it’s going to be a matter of free enterprise and free markets, then we need to let anyone say whatever they want about the potential health benefits and potential “disease” benefits of their product, and let the consumer decide what’s what. If we’re going to have the Government get involved, it should be only when it has seen reasonable evidence that a product is unsafe for the public or a company is being unethical. As it stands today, a company wanting to sell a health product that might help with a “disease” is considered guilty of harming or misleading the public unless it first “proves” through exorbitant steps that it isn’t. Guilty until proven innocent. And, ironically, silver is known to be entirely safe with normal, responsible use. (For the U.S. Government’s clear statements of this fact, and for guidance on how to safely ingest any silver product, see [www.silversafety.com](http://www.silversafety.com).)

Let’s give an equal, fair playing field to the smaller player with natural products who can’t afford to or can’t financially justify hundreds of millions of dollars to “prove” their product is safe and effective for helping prevent or treat a “disease” – whatever that word “disease” even means, really. Without FDA drug approval, selling a product with so much as the “intention” of helping to prevent or treat a disease can shut a company down. Yes, believe it or not, that is the language in the statutes: “intention.” Health care and free enterprise can work when good, smart people with ethics, integrity, and principles are in the business for the right reasons. Remove the impediments currently imposed by the FDA and the FTC, and the flow of information that can benefit the public’s health will open up nicely. Until then, antibiotics are a multi-billion-dollar industry and the public is in growing danger every day as a result.

**Ionic Silver’s Coming of Age**

How close are we to seeing ionic silver take up the slack? It’s all about who can profit. The technology is already here. The track records are already established. What’s delaying ionic silver from making the world safer is that Big Pharma doesn’t own it and can’t profit from it.

The term “colloidal” silver is familiar to many people. It’s the form of silver that people can make at home with simple equipment. It is also still sold in bottles today. It’s the form that Big Pharma used more than a hundred years ago, before we understood the chemistry behind it – and before the advent of the FDA and the laws that prohibit disease claims without first obtaining FDA drug approval.

What that Rice University study did was to provide an “answer to the decade-old question”, as the article in *R&D Magazine* put it, and to spell out that it’s only silver “ions” that kill germs, while “colloidal” – or “nano” – particles of silver are almost entirely just inert, inactive silver metal, unless and until they oxidize and release some of their
silver as silver ions. And it seems only a small portion of the silver in “colloidal” or “nano” silver particles ends up going through that conversion before it leaves the body; the vast majority just remains as inert silver metal, like jewelry, and serves no use at all.

The more efficient approach by far, therefore, is obviously to start with silver ions in the first place and to provide “all” of the silver in the ionic form. But since silver ions are unstable, a time-released delivery mechanism is needed. Achieve that, and you have one powerful substance. In the R&D Magazine article, Pedro Alvarez, George R. Brown Professor and Chair of Rice’s Civil and Environmental Engineering Department, is quoted as saying, “The key determinant of toxicity [to bacteria] is the silver ions. So the focus should be on mass-transfer processes and controlled-release mechanisms.”

In order to achieve controlled release that’s appropriate for the given environment, you need an appropriate carrier agent. In fact, all of those household and industrial products mentioned in the statement about silver being “used just about everywhere” have some form or another of controlled-release agent to slowly release the silver ions. In some cases (as with “colloidal” or “nano” silver), the slow release is achieved by simply allowing small particles of silver to oxidize over time, just as iron rusts through oxidation. But that process is way too slow to be at all efficient in the human body.

The recent study reported on in Nature was conducted on mice. It used “silver nitrate”, which is essentially free silver ions with no controlled release at all. That’s not going to work well in the human body, and certainly not with oral delivery. The silver ions would be mostly neutralized by chlorides in the system, which would bind up with them before they got to the place where they’re needed.

For internal human use, what’s needed is a product containing all of its silver as ions and utilizing a cutting-edge understanding of chemistry to release silver ions in the body efficiently and effectively.

“Opti-Silver” Enters the Game

Actually, a controlled-release silver ion product for human use has already been developed. Based on its unique time-release mechanism, it has solid patent protection in the U.S., with foreign patents issued and pending as well. I am the founder and CEO of the company that manufactures this compound.
The technology is called “Opti-Silver”, an ionic silver complex combining silver ions with citrate with potassium as a counter-ion for optimal solubility and controlled release in the human body. “Opti-Silver” is the key ingredient in both our consumer product, “Silver 100”, and in our professional-use product, “ProSilver 240”, sold through licensed healthcare practitioners.

For a very clear understanding of the chemistry behind our technology – and behind that of all “colloidal” silver products as well, for that matter – see the 45-minute recorded webinar at www.prosilver240.com/webinar.

We have sold a few hundred thousand bottles of our products to date, strictly as a “dietary supplement.” We have not as yet conducted any studies to prove it does anything beneficial at all in the human body; therefore, we do not – and cannot by law – make any such claims in any of our advertising or labeling.
The track record speaks for itself, however, as do the quotes from the experts in the field.

**Changing the Face of Disease Right Now**

We have a video interview with a nurse reporting on one elderly patient who had VRE, MRSA, C. diff, pneumonia and gangrene who was given only a few days to live. The nurse said, “Intravenous antibiotics weren’t touching it.” The family insisted the hospital use our “Silver 100” product and in a few days everything was testing normal or close to it. The woman survived. The hospital lab work shows the white blood cell count at a critical level and elevating rapidly – and almost instantly after our product was introduced it peaked and then came right down to normal, and it remained there.[9]

The nurse further reports in that interview that a co-worker became infected with HIV from an accidental needle stick, and after using our product the viral readings went from extremely high to “undetectable.”

(To see that 7-minute talk she gave, see www.argentechninc.com/nurse. And see the chart showing the woman’s white blood cell count go from critical to normal as soon as the “Silver 100” was introduced.)

A popular book on Lyme disease recommends our product above all others. Out of 200,000 bottles sold over six years, not a single customer has taken us up on our unconditional money-back guarantee out of dissatisfaction with the product.

Bill Deagle, MD, of NutriMedical, reported during a live radio interview I did with him recently an almost identical situation to what the nurse experienced. He said that the patient was in the hospital and given only a few days to live, so they tried the Silver 100 and within one day he literally walked out the front door. Dr. Deagle said, “He didn’t go to the morgue – he went home.”[10] Dr. Deagle calls our technology, “As much of an advancement in the medical field as the printing press and microchip were in their field.”

Consumers and physicians have been using the “Opti-Silver” products for a huge range of minor and severe conditions, both acute and chronic. Herbert Slavin, MD, Director of the Institute for Advanced Medicine in Lauderhill, Florida, reported that a patient with hepatitis B and C used the Silver 100 product for 90 days, that no other treatment was used, and that in that time period their indicators went from extremely elevated to “normal.” In a report he summarized the result by saying, “The treatment is dramatically successful.”[11]

Common cold, flu, food poisoning, sore throat, ear infection, urinary tract infections, topical conditions – the list goes on and on. Dr. Timothy Kingsbury, an osteopathic physician in Maine, used our ProSilver 240 product in his practice for four months with patients who had a wide range of infectious conditions that were not responding to other treatments. He then stated in an interview that with all his patients whose infectious conditions would not respond to any other form of treatment over the four-month period “the success rate with Opti-Silver has been staggering – well over 80%.”

As to the difference between our technology and other silver products in the natural-health space, Roger Leblanc, PhD, a Professor of Chemistry at the University of Miami and formerly head of their Department of Chemistry, has called our technology “light-years ahead of anything else on the market for internal human use.” Dr. Leblanc is said by some of his colleagues to be one of the top hundred chemists in the world. Donald Baird, PhD, is a Professor of Chemistry at Nova Southeastern University and was the former head of the Department of Chemistry at Florida Atlantic University. He has called our technology “brilliant, ingenious, unprecedented”, “the only product utilizing an understanding of modern chemistry”, and “between a few hundred and a few thousand times more efficient than anything else on the market.”

Yet in our advertising we cannot legally so much as hint at potential disease benefits. We have to raise money, do studies, and either play ball with Big Pharma through patent licensing (do we really want to do that?) and/or continue to market it in the natural health field as a dietary supplement with no disease claims in the marketing. We do have a study planned at one of the world’s largest clinical research centers for pediatric drugs, though. Things are going to be getting interesting.
Jockeying for Position

The natural products field has these "colloidal" silver products that are reasonably effective if used in huge quantities but that employ antiquated chemistry that has been around for more than a hundred years. Since it’s easy to make and perhaps as many as a few hundred companies make and sell it, and few consumers really understand the chemistry behind it, the field has been overwhelmingly dominated by the few companies that have been the most egregious in making fraudulent marketing claims. For those reasons, the "colloidal" silver category can never become mainstream.

Then there’s our patented ionic silver complex, which is available and on the market today but which to date has been sold with no marketing claims that so much as hint at any potential disease benefits.

And, of course, there’s Big Pharma, which is struggling to find a way to keep the health benefits of ionic silver quiet so the smaller, “natural products” companies that make silver products can’t educate and inform the marketplace and potentially take huge market share, and Pharma can hopefully own the entire space. The information about the benefits of ionic silver is starting to flow from the mainstream scientific community more lately, but the medical field is the only place Big Pharma wants the news to be occurring. They want to quiet the flow of information on the benefits of non-drug products that contain ionic silver.

I mean they really, really want to quiet that flow of information. After all, if they can’t make money on it, it’s competition. Their fiduciary responsibility to their shareholders requires them to stem the flow of any information that could help the competition if they can legally get away with it. Who cares if it’s preventing those natural product makers from saving potentially hundreds of millions of people from disease and saving countless lives? There are annual reports to be bolstered.

And how are they quieting the flow of that information?

The FDA already prohibits disease claims in the absence of drug approval. But there’s still a problem here. Remember all those products using silver that are “everywhere”? We’re not talking about internal human use now. We’re talking about mops, brooms, keyboards, sneakers, cutting boards, washing machines, doorknobs and so on. Not to mention many products in the industrial and medical fields.
Censorship Reaches New Levels

Here’s where it gets really funky.

In 1999, there was a press release about DuPont toothbrushes using ionic silver to inhibit the growth of bacteria. Over the following few years, a whole series of press releases came out on other household and industrial products using ionic silver.[12] By 2006 they were coming out in rapid fire. The manufacturers had press releases, websites, product ads and labeling speaking about the wonders of ionic silver and how powerful an antibacterial and antiviral agent it is while exhibiting no toxic effects to the human body and having only a minimal likelihood of causing resistant strains of germs.

So Big Pharma orchestrated a years-long campaign that was ostensibly to protect us from the possibility that we “might” find out in the future that silver ions are bad for the environment – in spite of the fact that that’s where silver comes from and the ionic form becomes completely inert really fast. Big Pharma is very conscious about the environment – as evidenced by all those antibiotics going into the environment.

Big Pharma managed to leverage the Environmental Protection Agency into doing something about it. Oh, they didn’t slow down the release of silver ions into the environment. What the EPA did was to classify mops, keyboards, toothbrushes and so on as “pesticides”, and take the position that the manufacturers have to either stop releasing silver ions into the environment OR stop informing the public in the advertising and labeling that the active ingredient is silver ions! If they say the active ingredient is silver ions, they have to go through all the years of hoops for “pesticide” approval. If they keep silent about it, they don’t have to do that. It’s the censorship enforced by the FDA on products sold for disease use for humans, only now it applies to “everything.”

Around 2007 the flow of information to the public just stopped. The products kept coming out and are “everywhere” today. Their labeling and ads say they fight bacteria, but not that ionic silver is the reason.

So, now you know that in virtually all cases when you see “Antimicrobial” on the package, it’s ionic silver that’s the active ingredient. But don’t expect to see that fact in any press releases or product advertising.

You can find that information if you really dig, but it’s not easy. Clorox, for instance, has huge shelf space today in major department stores with a broad line of cleaning products, from rubber gloves to plungers to dust pans; over a dozen products in all. They all say “Antimicrobial” in huge letters on the packaging. But to find out that the active ingredient is silver, you have to go to their corporate information website.[13]

I have a 3M Gel Wrist Rest for my keyboard. The ads and packaging say “Antimicrobial” in big letters. My five-finger sneakers, the same. Same for the DAP caulking I use for window sills. It’s “everywhere.”

But you’re not supposed to know what the active ingredient is. The U.S. Government is protecting you.

In reality, it’s the unsavory influence of Big Pharma at hand, as it does what it can to censor the flow of information and slowly moves to protect and grow its monopoly in the field of antimicrobial medicine.

Sea Change That Cannot Be Stopped

Ionic silver is the future of antimicrobial medicine. (Actually, I like to refer to ionic silver as the “anti-medicine.”) It will be interesting to see how things pan out, and who ends up making a difference first.

This recent study showing ionic silver making antibiotics more than a thousand times more effective was conducted with mice, using silver nitrate (essentially free silver ions). There’s a long way to go before they can create a product that provides the essential “controlled release” of silver ions in humans, let alone go through the hoops for drug approval.

It could be decades. But it is inevitable.

Of course, then there’s us, and the fact that we already have all of that, except for the FDA drug approval.
It’s very clear that the antimicrobial benefits of ionic silver have been known for a very long time. Delivery has been a challenge, but is no longer. Now, it’s all about business – all about who can make a profit on it and who can navigate the regulatory environment effectively.

The June 2013 article in *Nature* states:

> Like werewolves and vampires, bacteria have a weakness: silver. The precious metal has been used to fight infection for thousands of years — Hippocrates first described its antimicrobial properties in 400 BC — but how it works has been a mystery. Now, a team led by James Collins, a biomedical engineer at Boston University in Massachusetts, has described how silver can disrupt bacteria, and shown that the ancient treatment could help to deal with the thoroughly modern scourge of antibiotic resistance. The work is published today in *Science Translational Medicine*.

> “Resistance is growing, while the number of new antibiotics in development is dropping,” says Collins. “We wanted to find a way to make what we have work better.”

Collins and his team found that silver — in the form of dissolved ions — attacks bacterial cells in two main ways: it makes the cell membrane more permeable, and it interferes with the cell’s metabolism, leading to the overproduction of reactive, and often toxic, oxygen compounds. Both mechanisms could potentially be harnessed to make today’s antibiotics more effective against resistant bacteria, Collins says.

But how much do we even need the antibiotics, really? Can we perhaps drastically cut down on their use while drastically reducing infectious disease as well – by moving to ionic silver? And can we do it today?

It’s very important to note that, while Collins is concluding that the reason this is cool information from his study is because it can make antibiotics more effective, he’s also saying that the ionic silver does very well on its own without any antibiotics.

In a story about his study in the *L.A. Times*, they report that in one portion of the study ionic silver was compared to an antibiotic separately from one another, and the ionic silver worked five times as well as the antibiotic.[14]

And Dr. Petersen of Case Western stated that, “This new study shows that ionic silver makes the bacteria more susceptible to the antibiotics, and they explain the mechanism of action by which that occurs, but in addition that same mechanism of action also makes the bacteria more susceptible to the immune system.”

Of course, there’s no money in that for them. They don’t have patent applications filed on that. So who can blame them for downplaying it? Besides, they can’t even achieve the essential time-released delivery of silver ions in the human body without infringing on our patent.

And I’m out to bring this to the masses in the next few years, not in the ten or twenty years it will take Big Pharma.

Big Pharma won’t like it. Oh, well. They can still sell drugs for anxiety, since they have that monopoly.

How will we inform the public? Well, the public is getting pretty smart on its own. I can’t imagine that all that much can be censored these days. I have faith in the people, and in good people influencing the system. The wiser people become, as we evolve as a species, the more we improve the systems.

Even Dr. Oz reported on his TV show last November that silver is one of the most important things for people to be using.[15]

Silver has been a constituent of our food and water supply forever. The EPA has for years said that it’s entirely safe, with zero negative effects, if consumed within certain intake guidelines it has set, which it applies to the guidelines for how much silver is in our water supply.[16] Our product label results in only 25% of that amount being consumed per day. Indeed, more than 85% of the silver that was in the average American’s diet more than 100 years ago has been depleted through modern agriculture. As we see it, we’re just supplementing a natural substance that’s been depleted. All minerals have to be in the ionic state to be biologically beneficial in any way in the body. What we’re doing is perfectly natural.
So is wanting to help save millions of people from disease. But we’re not allowed to sell our product for that purpose. So we don’t. We sell it as a dietary supplement. And we trust nature and the intelligence of the people to do their thing.

Of course, we have strategic plans in place to dramatically change the game.

Yes, I’m out to make money – and at the same time to make a difference and contribute. I used to have the same attorney and accountant as Steven Jobs, and had the same VC who put Apple on the map looking at funding me. It was Ross Perot who persuaded me to follow my passion and make a difference by expanding the impact that natural health and healing has on the world. And here we are now.

Really good people with lots of money, lots of integrity, and lots of business sense can really change the world for the better – and even do so at a very healthy profit. I’m absolutely convinced of that. Ionic silver will be reaching the masses, sooner rather than later. This is a tidal wave that is unstoppable.

**Opti-Silver Will Make a Difference**

When we announced our technology, Mary Meeker, who was at the time the managing head of technology investments for Morgan Stanley, and who is the legendary visionary who funded Microsoft, Dell, AOL and Amazon from tiny to huge, stated, “With this technology, the company has the potential to have a billion-dollar company and make history changing the world of antibiotics, both from a financial point of view and a humanitarian point of view.”

She couldn’t fund us, however, because we were not a public company.

Note what she said there: change the world “from a financial point of view and a humanitarian point of view.”

How prevalent is that kind of talk in the financial world? That, to me, is where the rubber meets the road.

I’ve had offers for millions in funding from venture capitalists and investment bankers, and have turned them down because what we have is too important to risk involvement with people who are only after the money. Sure, business has to thrive to reach the masses, but profit at all costs can kill a company just as well as grow it. With committed investors who care about saving people from disease, we can do great things. At least that’s my conviction. I’m surrounded by many great people who are in complete agreement with this philosophy.

(One of these days I hope to create a company bringing investors and entrepreneurs together who hold as their priorities “how to make lots of money while doing good for society and the planet and for each other.” Personally, I have no idea why that isn’t the norm already and I can’t interact with people who don’t function at that level. I truly believe that as we continue to evolve, society is growing in that direction.)

After spending half a day in my office discussing the “Opti-Silver” technology and our game plan, the vice president of the Gold Coast Venture Capital Association said to me, “You’re sitting on a potential gold mine. I can easily see this company sold for half-a-billion dollars in five years. I want to introduce some investors.” I said, “Fine, but first you should know that I only allow investors who care as much that we’re saving millions of people from disease as they care that they stand to make a lot of money, who respect natural healing, and with whom I’ll share a mutually supportive, mutually trusting relationship. This is too important for anything less. That kind of shared values and vision is what will ensure our success.”

He made a face indicating utter confusion and said, “I don’t know any investors like that. I’ve never even heard of any investors like that. They’re only out to make money, and they’ll screw you any chance they get. But so what? That’s why you have lawyers.”

I said, “I already have plenty of small investors who meet those criteria, most of whom came from our customer base. Nobody is going to tell me I can’t find a few wealthy people who fit that description.”

He said, “That’s like one percent. How are you going to find them?”
I said, “I know, and that’s my job. That’s what I’m going to do. Watch me.”

And that is indeed what I’m currently smack in the middle of doing.

Stay tuned.

REFERENCES:


[9] The chart can be viewed on the Argentech website at http://www.argentechinc.com/nurse/chart.pdf. (The lab reports from the hospital are available on request with a confidentiality agreement to protect the patient’s privacy. The patient’s family is encouraging us to spread the word about what our product did for their family member and is happy to be contacted under appropriately discrete conditions.)


antimicrobial protection…” on page 3 of the PDF document (page 1 is printed on the bottom of the page), and search the PDF for other instances of the term "microbial" for even more product descriptions.

[14] "Silver found to increase effectiveness of antibiotics"; Monte Morin; Los Angeles Times, June 20 2013. In the test in question, only 10% of the mice given antibiotics survived while 50% of the mice given ionic silver survived. http://articles.latimes.com/2013/jun/20/science/la-sci-antibiotics-silver-20130620.

[15] YouTube video of Dr. Oz show. Dr. Oz introduced his father-in-law as his main inspiration and mentor, who is a highly respected cardiologist who was involved in the first-ever heart bypass surgery. His father-in-law then highlighted silver as one of the two most important products he recommends that people use. http://www.youtube.com/watch?v=exjO6opwl_c 4:15 - 4:44 and 5:14 - 5:35.


Jay Newman is President and CEO of Argentech, Inc. and also of Invision International Health Solutions, Inc., the latter being the maker of “Silver 100” and “ProSilver 240”. He is co-creator of the patented “Opti-Silver” technology (www.silver100.com/patents.html). He has been interviewed on numerous TV and radio programs, including Good Morning America and NBC TV News, as a leading expert in the field. He is an Advisory Board member of the National Health Federation (www.thenhf.com), the World’s oldest health freedom organization and the only one accredited to speak out at meetings of the Codex Alimentarius Commission, the highest international body on food standards – Codex has a strong impact on the public’s access to health-giving foods and supplements worldwide.