

Transcript: Q&A with Dr. Beer

August 5, 2004

Wendy Fisher: Welcome everyone who is on the conference call and everyone here. I'm Wendy Fisher. The idea behind the discussion today is to talk with with my Reproductive Immunologist Dr. Beer. He helps with delivering Lee and Andy, our babies, but also knows a lot about immunology and how it relates to the health of particular women and children. And I find when I talk to people, there are many general symptoms that can be related back to specific autoimmune disorders and disruptions in the immune system. So the opportunity here is for people to ask questions and maybe I can come up with a couple to begin, and since it's kind of free for all, I think what I will do is take a couple from here in my living room and then ask if there are any questions out there. People can give me their names and I will write them down and then I will call your name and then you can ask a question from the teleconference.

Dr. Alan Beer: And any of you who are phoning in and my e-mail address is beerdoc@aol.com. My staff or I answer all of our e-mails within 24 hours. So if there are questions I welcome them, and this is really the first place to start. I have a very active web-site it's <http://repro-med.net/> and most of what I will be telling you about this evening is on that web-site, that just to give you a few sentences as to what I do. The average age of couples I see is 39.6 plus or minus two years of age and they have been unsuccessful 4.4 plus or minus two times. I used to deal with individuals that have lost three pregnancies, disgustingly healthy but miscarried every pregnancy. And now deal with about half of my patient population again disgustingly healthy couples who make beautiful embryos in the test tube but when they are put back in the women's body they all wither on vine. So the average individual I see has been through IVF three times, they have spend a lot of money -- they are angry, they feel that the medical community has let them down, and it has been a real privilege for me to really learn that this condition actually thought of by many doctors as being "Nature's Way", "God's Will", "You are unlucky this time, try again, you will be more lucky the next time", is really an immune problem that causes rejection of the embryo and this immune problem is dangerous to women's health. And I would like to tell you at least what I know about this. All of us are born with natural killer cells that defend us against cancer. These natural killer cells see cancer cells, they spit out a chemical called tumor necrosis factor alpha and it paralyzes the DNA in the cancer cells so it doesn't grow and divide, that doesn't kill the cells but it's -- it's paralyzes the DNA, so it doesn't grow and divide. Certain individuals have the ability to make graduate student natural killer cells that no longer play by the same rules and these natural killer cells are exactly the same kind that we find in the joints of patients with Rheumatoid Arthritis and the organs of patients with Lupus, in the balls of the patient with Crohn's disease but we find them in the uterus and in the blood of individuals that I have just described to you, perfectly healthy but indeed have been very unsuccessful in their reproduction. And Wendy Fisher in whose beautiful home I am sitting this evening is a classic example of this. She had lost many pregnancies, came to me we found her natural killer cells were really on the "Olympic team" we were able to suppress them. She got pregnant the first, had Lee, a perfectly normal pregnancy, beautiful child, got pregnant soon after that, had Andy, a perfectly healthy normal pregnancy. But now that she is finished with her we are still dealing with the same immune problem that brought her to me the first time. So, I really understand what's happening and patients like all of you and I like to tell you how we make the diagnosis.

First of all, there is a simple blood test that I separate your natural killer cells and I put them test tubes with rapidly dividing for placental cells that if they are educated they will kill within two hours and I determine how aggressively they kill at three different

dilutions. And the numbers should be 10 in the first two, five in the second two, two in the third two. Patients like Wendy are 35 in the first two, 28 in the second two, 15 in the third two and anything above 15 will definitely kill an embryo. Since these cells secrete tumor necrosis factor alpha, one of the treatments that we utilize are the new Rheumatoid Arthritis medications called Remicade, Humira as well as Enbrel and the US government has been so convinced by my data that they patented me to utilize these medications, not for Rheumatoid Arthritis but for conditions of recurrent pregnancy loss and also implantation failure. And my hope is that we can now eventually get the FDA approval for these drugs to be utilized for this purpose because they truly work.

Many of the patients that I see come to me with a history of endometriosis. They have been treated by their doctors, they have had the endometriosis cleared out, they have been able to take medications for them and the doctors have pronounced them cured but they go to try again and they have an exceedingly high incidence of implantation failure and recurrent pregnancy loss. We have found that if we treat the natural killer cells and, Jane, you help me? The success rate is 80%?

Jane Reed: I don't have it in front of but I think it was in the vicinity of 78 percent success rate versus..

Dr Alan Beer: 39%?

Jane Reed: Yes, somewhere in the 78 percent pregnancy success rate versus something in the vicinity of 40 percent success rate when the drugs were not used. So there is a huge difference. Definitely ladies with endometriosis have a problem that continues even after the endometriosis has been removed and this problem is apparently immune because when you give them the immune treatments the pregnancies succeed.

Caller: Can you speak a little bit louder please?

Dr. Alan Beer: I'm sorry. Wendy had put Jane on another telephone.

Jane Reed: Yes, I am sorry. Basically I just said that ladies with endometriosis when they are using the immune therapies can have pregnancies with success rates of up to 78 percent versus when they do not use immune therapies, I believe it is somewhere in the 40 or 50 percent ongoing pregnancy success rate. So the immune treatments are obviously making a difference. And this is even in ladies who have had their endometriosis removed. It's often been said that when the endometriosis is removed that they will be cured. However, they continue to fail unless they have the immune treatments. And this is something which is new and this is something that is not known and it's almost tragic in a way that some of these ladies are told that they are cured, so called, when they have had these expensive surgeries and then continue to fail. You know, and it's devastating, yet there are treatments. And that's what Dr. Beer is pioneering.

Dr. Alan Beer: The thing I hate the most about this disorder or this new disease is what it does to a woman's spirit. You lose trust in your body, you get pregnant and you will wait everyday what's going to happen today to lose my pregnancy again. And it's a kind of a rust of your hope machine and your spirit and there is really nothing that can cure that other than proving that your body is indeed made to have babies and you are able to prove it to yourself. So my hope for all of you out there and all you here is that if you are infertile and don't know the reason, if you have been through a failed pregnancy or failed cycle don't listen to the advice we will get interested when you fail three. When a baby dies when a pregnancy fails something is wrong. And

it's a simple blood test and at the most a biopsy of the lining of the uterus to determine if the natural killer cells are there, no more difficult than that.

Wendy Fisher: Carrying forward, that you could use those tests, and what's interesting, to carry on with the women's health, is that things like endometriosis they don't stop. Like with me, once you have had your children, the immune system doesn't turn off. And so maybe if you could just talk about some of the symptoms and then the treatments in where the medical community also often times people will say "What is it called that you have?" Maybe you just go through this....

Dr. Alan Beer: (Jane hands Dr. Beer a piece of paper) Okay, the data with the endometriosis was 75 percent of pregnancy successes with treatment and 44 percent without treatment. Also: 15 percent of the patients I see who have activated natural killer cells who are infertile even if they are treated and successful like Wendy has been, 15 percent will stop making an enough serotonin. Serotonin is necessary each month to build the layers of the uterus into three layers or zones and allows blood flow to go into zone three and when I measure the serotonin level an individuals with this problem where it should be a 100 to 400, I may find it less than five. And these individuals feel desperate, they are project oriented, they obsess about things, they put too much on their plate, they let problems get to them, simple things where they have a melt down, reboot and then get on with their lives. They are the kind of individuals when your husband comes home from work and he might say to you, "Honey, I haven't even said anything and you have this attitude about you." And there are people awake early in the morning know that now that sleep there is no longer going to be a part of their morning, they are project oriented and they get on with their day. And this is totally due to low serotonin levels which we can treat. There are specific drugs that will raise the serotonin levels but the most specific thing is taming the natural killer cells which are so high that they are slowing down the serotonin producing cells from replicating and dividing. The next organ here is the pancreas, and 15 percent of the women develop adult onset diabetes because their insulin levels get off. And these individuals need to be treated with a glucophage called Metformin to bring the free-insulin level down. Free-insulin in these individuals are very elevated. Free-insulin doesn't control the blood sugar, it does only one thing, it makes new fat cells and it puts them on the thighs, the butt and the hips, and women can jog, women can eat 500 calories a day, they will lose weight in their face, their neck, their breast and their arms, but the fat on your legs, butts, thighs, and hips, stays, and this is indicating a chemical imbalance of the insulin. Many of the couples come to me and say and their husbands say "My wife is kind of given up, you know, she is putting on weight, she must not be exercising enough, she must be really be cheating on her diet" and all the time it's the chemical imbalance and so it's really important for me to meet with the husband and the wife both, because the husbands need to understand this also. The third thing that happens is that 15 percent of individuals get underactive in their thyroid gland. Because we begin making antibodies against for thyroid gland because individuals need to have their natural killer cells brought down and need to be treated with the thyroid medications. So, infertility is hazardous to a woman's health, and we are only finding that out because we are beginning to take it seriously as a new disease. Their bodies are really made to have babies when it's not working something is wrong. And when it's not working when you are making beautiful embryos in the test tube and they put them back in your body and they is still repudiated, something is wrong. And we are living in a time that we can take care of this, we can diagnose the problem, we can do something about it.

Wendy Fisher: Before you answer the questions, can you also talk about the relationship of autoimmune disorders and then with children?

Dr. Alan Beer: Yes. We have found that that the incidence of many individuals I see might have one live born child and then miscarried after that and then I have outcomes on several thousand children. One thing I have learned that if the women is not treated properly there is a 10 fold increase in hyperactivity, Attention Deficit Disorder, autistic behavior in these in these children and some of them even have slower than normal growth. So a problem which we have treated in the mother can be passed on to the infant and that occurs primarily in individuals that have also made an antibody to their own serotonin which helps lower the serotonin level just as you can make an antibody to your thyroid, to your insulin and become adult onset diabetic. These individuals have antibodies to their own serotonin and that passes to the child and it's my feeling that this is in part responsible for the behavior changes that we see. We see a higher incidence of adult-onset schizophrenia in families of women who have a history of recurrent pregnancy loss or also implantation failure. So, for the sake of children yet to be born it's really important that you know how friendly your body is to have babies and whether there are any immunities that you have that are affecting your own systems that could be passed to the unsuspecting child. And in those individuals that have that problem we treat the mother with good antibody in the form of Intravenous Gamma Globulin (IVIG) and Wendy probably had enough to pay this house... this is a beautiful house I might add!

I will take questions from anyone.

Wendy Fisher: Does anyone online have questions?

Caller: Yes, I have a question. In the NK Assay Follow-up...

Wendy Fisher: Hold on....

(Loud audio reverberation)

Dr. Alan Beer: You know, I will just repeat your question and then --

Outside caller: Should I ask you the question?

Dr. Alan Beer: Yes, please.

Outside Caller: In the NK Assay Follow- up there is one, two, three, four, five, six, seven components.

Dr. Alan Beer: Yes.

Caller: Of the seven, which are the most important to be within range?

Dr. Alan Beer: She is asking about the NK Assay Follow- Up that there are 7 things listed as numbers and she asked which were the most important numbers. The first number is the most important that tells me how aggressively your natural killer cells kill the embryo cells within a two hour period. The second number should be half of the first number, even if its elevated because in that second number I use half the number of natural killer cells, so I should get half the degree of killing. And usually individuals who have this problem will have five numbers in both the first and the second too. The next five numbers are simply numbers for me. They tell me, is this is a good blood sample. There is CD3 cells which are your T cells, I need to know that that they are there in adequate number. That CD19 cells which are your antibody producing B cells, I need to know that they are there in adequate number. And their CD19+5 these are activated antibody producing cells that currently are producing new antibody, in your body. And there are CD56 positive cells which are the natural

killer cells that I tested in number the first number and the second number. And many times individuals will have normal numbers of natural killer cells but they are really educated, the killing power will be very, very high. So, the first two numbers are the most important and the second to the last number, the CD56 is third in line, the other three numbers tell me if the blood sample is been adequately drawn, it wasn't in flight too long to come to my laboratory and that we can make something of the numbers.

Caller: In the first number, the 50:1 ratio --

Dr. Alan Beer: Yes.

Caller: Your limit says 10 to 40, but you like that number to be below 15, is that correct?

Dr. Alan Beer: Okay, the reference range, anything above 10 is too high in the first two, anything above five in the second two is too high, anything about three, the highest number I have ever seen are 40 in the first two, 30 in the second, 20 in the third. So, those are really the reference range of how educated your natural killer cells are. But, if you don't have the problem your numbers would be below 10, 5 and 2, and your natural killer cells numbers would be below 12.

Next Caller: I have a question. I am just curious as to when you have a new patient coming to you for this diagnosis and you do this blood test, what percent of patients coming to you do you identify with these excessively high levels of killer cell behavior and so what percent of the patients coming to you, granted you are already saying are a group of patients that have pursued other paths unsuccessfully, but essentially I asking you, of the ones you see, what percent do you identify having this particular problem?

Dr. Alan Beer: Individuals that I am talking about today that have failed three cycles or three pregnancies, 25% of those will already be on the Olympic Team like Wendy having already gone through activation of the natural killer cells as aggressively as this person is going to do. There are other categories of problems which are treated with easier medications. Some individuals don't have enough antibody to protect their baby, we can do something about that. Some individuals have made antibodies to the glue molecules that attach the baby, these are phospholipids, they need baby aspirin and heparin. Some individuals have made an antibody to the baby's DNA and they need to have prednisone or a steroid in addition.

Caller: But you have found that people who failed 3 IVFs that 98 percent have this one of these 5 types of immune problem?

Dr. Alan Beer: Yes, that's correct, and before a patient ever comes to me I review your extensive registration form that lists your history and I have the Self Test that I put your history into that gives me a score, that if your scores is above 2.2, I am essentially a 100 percent sure that you have an immune problem and I get your medical records from your doctors also ever before I see you and then do the testing before a couple of days. And so by the time you are consulted here, I know what the problem is, I can define it for you, we can review like we are reviewing tonight and we can outline a treatment because a treatment must be done for 30 days prior to cycle of conception, during the cycle of conception and a minimum until we see the heartbeat in the baby on ultrasound. The success rate drops remarkably if we start the treatment with a positive pregnancy test. From the latest that I have a treat a couple is on cycle day 6 for the cycle that you are conceiving.

Caller: Could you repeat those numbers that you have said with the highest that you have ever seen?

Dr. Alan Beer: 40 percent killing power at 50:1, 30 percent at 25:1 and 20 percent at 12.5:1.

Caller: Did you say 25:1 you wanted to see as half of 50:1?

Dr. Alan Beer: That's correct. And then the next thing that I need to see is that the 25:1 will be half of the 50:1, the 12.5 will be half of the 25:1.

Caller: That means they have stronger killing power?

Dr. Alan Beer: That's correct. And then there are four more numbers in the NK Assay where I add IVIG which is one of the treatments, its an antibody that you can buy in a bottle that activate the off switch of the natural killer cells. So, if add it to the natural killer cells I would reduce 50:1 by half the 25:1 by half and the 12.5, because I have activated the off switch of the natural killer cells. Most of the patients in this room and those that I am talking to by phone will have no reduction by adding the intravenous gammaglobulin, because the graduate student natural kill cells that most of my patients have gotten rid of their off switch so they don't respond to the normal controls which occur in a successful pregnancy and this are the exact same kinds of cells that cause Rheumatoid Arthritis. And they are the ones that need the medications for Rheumatoid Arthritis, the Remicade the Humira or the Enbrel. And I have used all of them, the Humira is the most effective, but they all work in the same way. They paralyze the Tumor Necrosis Factor the natural killer cells do, this happens normally during the pregnancy, but we have to reduce it in patients with this problem to baseline levels or the pregnancy doesn't get a start or it's damaged early and miscarried.

Next Caller: Can I ask a question about the Humira flare?

Dr. Alan Beer: Yes. Some of the patients that I give the Rheumatoid Arthritis medicines to and test 30 days later show a higher level of killing even though I have given them a very specific medication and this is referred to as a Humira flare. If we look to see does that predict a failed cycle or does that put you in a category that means you are not going to have a baby the answer is "No". And Jane, could you help me with the data? The answer is that the Humira flare that the liveborn pregnancy rates are no worse in those individuals whether you are in the IVF cycle or you get pregnant on your own than those individuals who don't have the Humira flare. So, to me, it's become now an indicator that the medication is working for you. I didn't always know that, but I have that data now and Jane will...

Jane Reed: Yes, it's interesting that the patients who have flared while they were on Humira preconception actually show better ongoing pregnancy success rates, atleast that's what we have been finding so far. The non- flaring patient averaged 71 percent ongoing pregnancy success rate after using Humira and the flaring patients averaged an 88 percent ongoing pregnancy success rate. So people, when they have these flares, feel like they are sick and they are scared and they think they are not going to succeed and the reality is that Humira is still working and, in fact, the pregnancy success rates are higher.

Dr. Alan Beer: Yes.

Caller: People stayed on it or they have stopped it after the flare?

Jane Reed: So, what was the question again?

Caller: Does that mean that after the flare these people...

Jane Reed: This is after the flare. Now I have got to say that these patients, when they get pregnant are not flaring. Okay, this is after the flare..They have to control the flare usually with gamma globulin, IVIg. So, there is a possibility me and Dr. Beer discussed that maybe some of these patients are using more IVIG preconception. But, in any case, after the flare, when they have had a flare, it does necessarily mean that they are going to fail on Humira.

Dr. Alan Beer: So the protocol now is for patients to take the Humira for 30 days prior to the cycle of conception, 30 days during the cycle of conception and all patients would be on it for three months, if they are pregnant they will continue until a heartbeat, if they are not pregnant, I will stop after three months and now you have a four month window of opportunity where things will remain quieted down. So, I give it in no longer now other than three months of the Humira and then stop in all individuals. And that's what the new data is showing and I don't counsel you who have a flare not to try, because the success rate is higher in those patients with flares and those that don't.

Caller: I had a very interesting situation. I had contacted Dr. Beer last year. He had done all the results and I had taken Humira first time around for a month and when we re-tested the numbers came down. So, that was the positive sign for me. And then we decided to wait for the cycle. I decided to postpone my IVF because, we were traveling. And this year again in July we started back with Humira two doses for a month before my IVF and at that point I had a Humira flare. So, I got worried and scared and although Dr. Beer said, gave me the green signal, you know, I didn't have all this knowledge of Humira flares so I kind of took the fastest road and said I am going to continue in Humira postpone my IVF cycle to September and wait and see how the flare is fully taken care of. So, as a result, I have taken four doses of Humira and I am going to probably take three more before I actually do my IVF. And I am going to get it tested before the IVF which would be six Humira doses. And hopefully that will give a result where I want the numbers to be that it should be okay to go ahead. I don't know if this is making any sense?

Dr. Alan Beer: Okay. This patient I know very well. I didn't call you by name but I know who you are. She took the Humira, had a Humira flare, felt concerned about it so she postponed her cycle and is continuing on the Humira only to restart again in September and she is going to be tested prior to starting her new IVF cycle. She will have been on Humira how long, six doses did you say?

Caller: Yes, by the time I get tested again it will be six and at the time I start the IVF it will be seven doses.

Dr. Alan Beer: Yes. So, that's exactly what we have learned is the proper length of time for an individual to be on Humira to have the 85 percent success rate. So, this data has come in a good time to help build up your courage.

Next Caller: I have a question. I have high natural killer cells my 50:1 and my CD56 are both above 18 or at 18 and I have done two double doses of LIT which gave me really good results for my antibodies. And they went up to 88 percent. And I have low cytokines so, I didn't get any Humira and you didn't think that I had NKUs, I am not sure why but, you didn't think that from the remainder of my, but I had poor suppression with IVIg before LIT, but, I am starting my first preconception IVIg next week. And so your data tells you that the LIT will help me with the IVIG suppression? Now that I have had 2 doses of LIT the IVIG will work better? LIT did nothing for my natural killer cells, they stayed at 18 prior to the LIT's I had at 18 and they are still there. So I know some people have NK suppression with reduction in cells with the

LIT, that didn't happen for me. But, my concern is I am going to do preconception IVIg, but my first NK assay show that I didn't suppress well all.

Dr. Alan Beer: Okay. I will answer the question and I will repeat it to the audience here. The highest success rate in any group are in patients who have both lymphocyte immune treatment or the LIT and the IVIg so you are in very, very good company. Nearly all of these patients had natural killer cells that weren't suppressed by IVIg alone and we have found with the lymphocyte immune therapy, that it shifts or reconditions the natural killer cells to rebuild their off switches so that they now will respond to the IVIg. And my graduate student has done this work and has recently published it. So, of all the therapies that work the best its the therapy you have, that is to receive the lymphocytes from your husband which constitute to make an antibody to your husband's DNA the same thing that you would do during a normal pregnancy, this antibody should be strong enough to activate the off switches of your natural killer cells, but in 15 percent of my patients it's not strong enough and you need to now to add the antibody in a bottle which is the IVIg. But, the best treatment for you is the LIT and the IVIg and you and your husband should go for it.

Next Caller: I have a question. If you have been on Humira for the three months and your levels have come down and that means and you have asked Dr. Beer to stop Humira and to go ahead for the next four cycles, do you then need IVIg, or no?

Dr. Alan Beer: The patient asked, if you have been on the Humira and it worked for you and you have been on it for a long enough time that I clear your first cycle of conception, do I still need the IVIg?

Caller: Correct.

Dr. Alan Beer: I base the need for IVIg on the natural killer cell test done after you have been on the Humira, and some patients will need the IVIg in addition. I can say that my colleagues in the United Kingdom, if they see a patient of mine that's been on Humira and this patient now goes into an IVF cycle all of those doctors will give IVIg in addition to the Humira whether I recommend it or not because, in their experience they feel these patients do better or more of them get pregnant and fewer of them miscarry. So, there is certainly no harm in doing it, but I think we have sophisticated enough testing to know whether you need it or not.

Caller: Can I ask you a question about LIT?

Dr. Alan Beer: Yes.

Caller: And it's sort of in relation to maybe a Humira flare. I had LIT done a few weeks ago and about two weeks later, I had some pretty bad joint pain, and I was wondering if that is that a good sign like a Humira flare or is that telling me something different?

Dr. Alan Beer: (To audience) This patient had the vaccination that causes her to make an antibody to her husband's DNA. And two weeks after the immunization she got bad joint pain and wondered if that is a good sign or a bad sign. It's a good sign. It means that the lymphocyte immune therapy is working, that you are making antibody that is initially suppressing your natural killer cells. They love to fight back. And in the fight back period you are experiencing the joint pain. But that will go away. So, that, to me, that's a good sign.

Caller: Do you think I will need another dose after this or do you think that that would do it?

Dr. Alan Beer: We'll check to make sure that does it, I won't guess about it.

Next Caller: May I go back to your comment about the highest levels you have ever seen?

Dr. Alan Beer: Yes

Caller: You are talking about the E:T ratios?

Dr. Alan Beer: This lady wants to go to Athens!

(Laughing in the room)

Caller: She wants to go where?

Jane Reed: Olympics!

Dr. Alan Beer: We were talking about the Olympic team and said the patient question is about the highest level I had seen.

Caller: Yeah. Okay, I want to go to Athens, yes, I understand. Well, my mine is 50.5

Dr. Alan Beer: It was what percent?

Outside Caller: 50.5.

Dr. Alan Beer: Well, I'm going to have to change the reference range -

Jane Reed: Was this test done at Chicago or was this done at another lab?

Outside Caller: PSL.

Dr. Alan Beer: Oh, it was done at PSL? Now, their results are about 15 percent higher even though they do the test exactly by my recipe their rate is higher and they get higher results.

Outside Caller: So, does that mean I'm not on the Olympic team?

Dr. Alan Beer: Exactly that's correct, you need to subtract 20 from that.

Outside Caller: Oh, thank you because my doctor said, he is not a specialist as you are, but he did say that was the highest he had ever seen.

Dr. Alan Beer: Yeah.

Outside Caller: So put that 20 percent, well that makes me feel a lot better, thank you.

Next Caller: I have a question?

Dr. Alan Beer: Yes.

Caller: You are treating women in the 39.6 and above age bracket, plus or minus a couple of years?

Dr. Alan Beer: Correct.

Caller: Now, the IVF world believes that women nearing 40, are over and beyond the hill, it's like a done deal, you are downhill from now on and their eggs are not good and as result your DNA maybe also not good. So, where does immune therapy come in to change that or to even rectify it that with the immune therapy somebody who is 40 plus, is going to create as healthy of an embryo, as somebody who has not reached that 40 year mark?

Dr. Alan Beer: (To audience) This patient probably is going in the wrong side of 40 and she is really wondering about what her chances are because when she goes to IVF centers, they frown at her and they urge her to do something different. You probably know the success rate, this is the success rate in individuals and I have seen personally that had failed three IVF cycles before I see them, come to me for testing diagnosis and treatment. And in the 40 to 42 year age group, 58 percent of those who return to IVF deliver a baby. So, the success rate is not two percent, like most of the IVF centers will tell you, it's 58 percent and women that are 43 to 46, the success rate is 17 percent and if we use donor eggs in the older individuals it jumps up to 69 percent. So, I no longer can have long discussions with people like you about their age, because, to me, as long as you are menstruating and producing eggs, there is a possibility of a child in your home. And, of course, we worry about the embryo, but in my experience that if there is DNA damage of an older women's embryo or egg that those pregnancies will fail in a matter of two or three days, at the most a week so that we don't have to worry about an abnormal baby. In fact the incidence of Down's Syndrome and genetic abnormalities in women within the age group is two times less in the immune treated group than what the life tables predict for people in that age group. So, what we are doing is not making it more likely for you to keep an abnormal child.

Next Caller: If somebody "has no trouble getting pregnant", would you recommend going with fertility treatment in addition to the immune therapy just to boost the chances of getting pregnant during the immune therapy, or would you recommend trying the natural way?

Dr. Alan Beer: The highest success rate are in those individuals that have failed three IVFs, who, after the immune treatment, get pregnant on their own. And the peak time of that happening is 17.4 weeks after the immune treatment is started. So, if the immune system has caused some damage to the eggs, it appears that it takes at least three to maybe four months for this to heal, but these are all individuals that had failed IVF three times, they went back to IVF after treatment, failed again and then again, and I told them to give up and these are individuals who started showing up pregnant on their on the average of 17.4 weeks after the treatment was begun. So now the advice I give to patients, who have high numbers, is to have the treatment, give your body time to heal and then go for it when we know that you are in a safe window of opportunity.

Next Caller: Dr. Beer?

Dr. Alan Beer: Yes.

Caller: Okay, so timing-wise I am really just started my treatment program within the last six weeks. I started baby aspirin six weeks ago, I started the folic acid and the fish oil about six weeks ago and I did the LIT about three weeks ago. I was going to attempt to do a IUI next week

Dr. Alan Beer: No. No. The highest level of antibody from Lymphocyte Immune Therapy is at four weeks after the immunization. So, you are right on target.

Outside Caller: But I have not done, I am homozygous for the MTHFR but I have not started the Lovenox because I did not have results back from my numbers yet. So I was just going to take a shot at the IUI and I do have the phosphatidyl ethanolamine antibody. So I mean is it even worth doing the IUI or ?

Dr. Alan Beer: Well, I think that with the phosphatidyl ethanolamine antibody, you have to do an IUI, because ethanolamine is really the glue on your husband's sperm that allows it to attach to the egg in the process of fertilization and women with anti-ethanolamine antibody actually de-glue the sperm so although they get to the egg, they are not very interested, because they do not stick, and then only way to bypass that is to put the sperm directly in the uterus to get to the fallopian tube before they are inactivated.

Caller: Okay. Do I know it is a little bit late, but should I have started the Lovenox shots anyway?

Dr. Alan Beer: Yes, definitely.

Outside Caller: Right, now. Okay.

Dr. Alan Beer: You are homozygous for the MTHFR?

Outside Caller: Yes.

Dr. Alan Beer: Yes, you really need to be on the Lovenox once a day and then increase it to twice a day with the positive pregnancy test. And I want to you to see that they are doing Home Pregnancy Test seven days after the insemination and observe the test for an hour, before you declare negative. Repeat it again two days later, observe it for an hour, because with the first faint positive I want to re-test again and I want you to increase the Lovenox to twice daily.

Next Caller: Dr Beer, Hi. Thank you for time tonight.

Dr. Alan Beer: You're welcome.

Caller: I had a quick question I feel a step behind a lot of these other women, because I am just getting in to this whole process, but I have had three miscarriages and we just had a call yesterday that all of our test results come in and I am homozygous for the MTHFR in their terminology my husband's LAD test was negative, which is not what they are looking for, and my ANA test was abnormal. Where do I start?

Dr. Alan Beer: Well, first of all, before you would be cleared for a cycle of conception you need to be on the baby aspirin, the folic acid, B12 and B6 which is Folgard 2.2RX. You need to take two daily for atleast six weeks to top up your stores before you start the cycle of conception, because the baby's brain development needs adequate folic acid and with the MTHFR mutation that means that you are folic acid deficient, B12 and B6 and we have to correct that. So baby aspirin a day, the Folgard which is a prescription vitamin, two a day and during that period of time since you are not making any antibody to your husband's DNA, I would recommend a trip to Nogales to get the Lymphocyte Immune Therapy.

Caller: Because I didn't know whether I needed to arrange for consultation with your office or do you need someone locally. I am calling from the Orlando Florida area. We are just, you know, just beginning the process and we just want to make sure we leave no stones unturned as far as treatments that are out there for us.

Dr. Alan Beer: Yes. You know, why don't you consider at least chatting with me by phone? I would need you to register from the web-site so that I could know your history. But knowing that you are MTHFR homozygous which means that you are definitely are going to need to be on the baby aspirin...

Caller: But I have done that with my first pregnancy with IUI which died at the nine and a half weeks...

Dr. Alan Beer: And I also would recommend that you have your natural killer cells checked because..

Caller: Holy molly.

Dr. Alan Beer: Okay great.

Next Caller: I have a question. My cytokines were normal or low or fine I guess that when I had a test with Finch back in May before I did my double dose LIT and I assume if upon positive pregnancy you check those again but what is your experience with, if your cytokines are normal and that so therefore I didn't need Humira, do they typically stay normal if they have been normal or if they never flared?

Dr. Alan Beer: There is an 85 percent... (To audience) She is asking me if her cytokines are normal in the Cytokine Assay ..and I assume your NK Assay is also normal?

Caller: I'm the one that has both, my NK Assay is 18 for 50:1 and the CD 56.

Dr. Alan Beer: Yeah, the NK Assay measures the natural killer cells that you are born with, those that are suppressed by the IVIG. The Cytokine Assay measures the graduate student natural killer cells of the type that require the Humira or the Rheumatoid Arthritis medication. You obviously aren't in that camp. You obviously are in the phase where you are activating the natural killer cells you are born with and those are treated with the intravenous gamma globulin (IVIG).

Caller: So then, do you check it if your cytokines have not been abnormal, do you check them again upon pregnancy to see if they are flaring?

Dr. Alan Beer: Correct

Next Caller: Dr. Beer?

Dr. Alan Beer: Yes.

Caller: I have a question about the NK Assay.

Dr. Alan Beer: Yes.

Caller: You have not seen that for the 50:1 anything above 15 will definitely kill an embryo?

Dr. Alan Beer: Correct.

Caller: My question is how much time do you have until that happens and I guess my concern is sometimes the time lags between when you get your blood drawn and when you get the results back it seems like the numbers can change very quickly.

Dr. Alan Beer: (To audience) She is asking a question about the NK Assay and if your numbers are above 15 then I am concerned that it could damage the embryo and she is wondering how quickly things can change, that was your question, is that correct?

Caller: Yes, and you know it's different for different stages of the pregnancy.

Dr. Alan Beer: 15 percent of individuals that are perfectly normal prior to a pregnancy being established will show an elevation with the first positive pregnancy test and will need IVIG. Once the IVIG has started the average patients will be about 4.2 doses, so the fact that you need one dose its rare that you will not need a second one three weeks later, a third one three weeks later, a fourth one three weeks later. But the testing tells me when its safe to stop, that's one thing for certain that I do know.

Caller: And that before those things would be after the pregnancy test or did that include the preconception IVIG?

Dr. Alan Beer: That includes the preconception.

Caller: Okay, thank you.

Next Caller: If your natural killer cells are below 15 and everything is going well and you do the IVIG, I guess I had my natural killer cell tested but I did the IVIG and everything when the tests came back everything was fine but I had already done the IVIG. Could IVIG ever hurt anything?

Dr. Alan Beer: No, not at all.

Caller: It wouldn't cause a flare?

Dr. Alan Beer: No.

Caller: Okay. Thanks.

Next Caller: Dr. Beer, I have two questions, I find this information very important, I have four or five friends that could really benefit from this knowledge and I'm just wondering if you could repeat your web-site, so that I can make a note of it for them.

Dr. Alan Beer: Yes, the web-site is Repro-med.net. You know, my oldest son called me and said that you know I did a Yahoo search on Beer and the first thing that came up was my dad, not a Budweiser brewery!

Caller: Well, wow, that's well that's very promising! My second question is I have a very dear friend who had Guillain-Barre Syndrome as a child and then was recently diagnosed with MS and actually one of her children now has autism and I'm wondering if somebody that you could help?

Dr. Alan Beer: Oh definitely. This individual most likely has made high levels of antibody to her own neurotransmitters which is serotonin, endorphins and enkephalins. I have actually treated adults with this problem and she really needs a good immunological work-up. And her son probably needs to spec scan to make certain that there aren't serious abnormalities in blood flow to centers of his brain and I would be happy to give them a recommendation of people with -- or specialist in autism and the spec scan Dr.

Mishkin at UCLA, Marvin Mishkin M-I-S-H-K-I-N. He is at UCLA Harbor and he is a real specialist.

Next Caller: Can you comment on after woman has been through this therapy and completed their families, what happens to the immune system then and are there things that need to be addressed post child bearing?

Dr. Alan Beer: Yes, I used to forget about people like you after your children were born, but only come to find out that a majority of the individuals later in life, and the oldest child in my program is 24 and these individuals who were having their knees replaced, their ankles replaced, premature osteoporosis, feeling very poorly and indeed, after the pregnancy, the natural killer cells came back and were causing damage to their own organs and joints. So I recommend that all individuals who have this diagnosis be tested yearly to make sure those things aren't going awol for you.

Caller: And this something that's hereditary upper down the line?

Dr. Alan Beer: Yeah, it follows certain DNA numbers that you get from your mother or your father. And we test these in the infertile couple and the most common number is DQ alpha 4.1 or 0501, that it's almost like the Rh factor in a mother, it stimulates or awakens her natural killer cells to level that is threatening to her own health. But we can definitely test for that and if it runs in families, then your sister, your brother may be prone to get into the same situation. Oh, the tests I do are thyroid function, insulin level, serotonin levels ...

Jane Reed: Bone scan?

Dr. Alan Beer: And a bone scan far earlier than most insurance companies are willing to pay for.

Caller: What is the standard recommendation based on insurance companies for bone scan?

Dr. Alan Beer: They usually do it in individuals that are that are postmenopausal. But in individuals like yourself I list it as an autoimmune disorder and possible osteoporosis so they usually will pay with that.

Next Caller: Dr. Beer, I have one other question. When I was pregnant, with my two daughters, I had to take Rhogam because my blood type was different from my husband's but I have never had any autoimmune disorder, so is that anything I have to worry about or?

Dr. Alan Beer: No, the two totally separate issues and they give you the antibody just like IVIG to prevent your body from making the wrong kind of immunity. And we are now approaching this with this infertile couple, so if you are putting off child bearing until age 35 because you are a career women and you are working, I think there is a going to be a day when every women will be told to have a pregnancy risk assessment to make sure that you don't spend the next five years of your life being unsuccessful.

Guest: I'm sorry I missed that. They have pregnancy what?

Dr. Alan Beer: Pregnancy risk assessment.

Guest: Oh, okay.

Next caller: Dr. Beer?

Dr. Alan Beer: Yes.

Caller: I have question. On your webpage on your Yahoo page, somebody had asked you that is it good that if people conceived twins through an IVF cycle, that it is almost a better idea to conceive twins than a singleton to up your chances to fight this whole immune problem?

Dr. Alan Beer: Yes (to audience) Did you hear her question? She asked about twins, because if people 39.6 have their druthers they would like to do it one shot, to have twins or triplets!
If I had my wishes, all patients with the immune problem would carry twins because the twin pregnancies do better than singletons as far as the immune system is concerned. And even if you have a vanishing twin, we have found that the ongoing pregnancy success rates with the vanishing twin, triplet or quadruplet is 85 percent. So that a vanishing twin during a cycle or during a pregnancy doesn't put the other child in jeopardy. And these are women that are living in terror, they are seeing one baby dissolve and another baby, they would buy an ultrasound at Wal-Mart if they could, if they could to scan their baby every morning, say "Good morning baby", "Good night baby" because otherwise you are obsessed and worrying about it. But a vanishing twin doesn't bother me because it's not going to prejudice the one that's surviving.

Caller: Dr. Beer, just sort of follow-up on that thought. Would you advice when people have been cleared and you know, their levels are down to do more of a stimulated cycle whether that's Clomid or IVF?

Dr. Alan Beer: Yes, I like you all to be pregnant with twins.

Caller: Well we would like to be pregnant, period.

Dr. Alan Beer: Yeah, I understand that. The message is that by doing a stimulated cycle with intrauterine insemination you increase your chances of conceiving each cycle by 10 to 15 percent. And 60 percent of the patients that I see are pregnant within two cycles.

Caller: I'm sorry could you repeat that?

Dr. Alan Beer: Sixty percent of the patients that I see are pregnant within two cycles of trying and if they are not, I'm going to be worrying about you that something is still wrong.

Caller: Trying how?

Dr. Alan Beer: However you are set up to try.

Caller: With natural or with fertility treatment?

Dr. Alan Beer: Correct.

Caller: Dr. Beer, have you found that going with a natural cycle compared to the stimulated cycle whether it's stimulated IUI or IVF changes the difference how the immune system reacts to the natural cycle versus how the immune system reacts to the stimulated cycle?

- Dr. Alan Beer:** Yes. The question is stimulated versus the natural cycle. Stimulation results in high estrogen levels and high estrogen levels stimulate the bone marrow to pour out more natural killer cells and the success rate of the stimulated versus a natural cycle, it's better with the natural cycle.
But that's hard to tell a couple that has spent their life savings on three failed IVF cycles and now see this crazy doctor in California who is telling you to try on your own for two cycles, but I have learned this from people like yourself.
- Caller:** Do you have numbers on the percentage of losses that are due to "bad eggs" on the immune treatments? Does that does that question make sense?
- Dr. Alan Beer:** Yes. (to audience) The question is do I have any statistics on the quality of the eggs or bad eggs that are produced, and does this improve with the immune treatment? The answer is yes, it does improve with the immune treatment, and any cytokine number above 40 tells me for certain, this a TH-1 TH-2 cytokine assay, it tells me for certain that your eggs most likely have DNA damage, and I know when that exists, it takes a minimum of 17.4 weeks for that to heal. And I know this by doing biopsies of eggs of individuals that go to IVF. And sometimes this is difficult because people like you go to IVF and a good cycle will be that you will produce three or four eggs, not 17 or 21 so immediately the doctors will say, well, I'm not going to biopsy your eggs because I might damage them. But I have learned from individuals that have failed three IVF cycles and then have gotten pregnant on their own that occurs about 17 weeks after the treatment has started, and that's now this been confirmed by my program in London, where we are doing egg and embryo biopsies on everyone.
- Caller:** So do you recommend not even trying until those 17 weeks have passed or I am more confused about this?
- Dr. Alan Beer:** The data would tell me that if your cytokine level was 40 or above that I would tell you not to try for at least three months.
- Next Caller:** What is the minimum amount of problems or time of trying that you would take a new patient on? Whether they have done either extensive things with Clomid or IVF? Because I have a number of friends who have just started to get into the more significant ways of trying.
- Dr. Alan Beer:** I recommend the patients who are 35 and above who have been have been living and loving together like it could work and are not pregnant to be evaluated and in those individuals are find a large group of immunological problems.
- Caller:** And since long should they be trying just naturally before they conceive?
- Dr. Alan Beer:** I have very few patients that have been trying for a year or more but the vast majority of them have been as you know, been trying forever and come to me as a last resort.
- Next Caller:** Dr. Beer?
- Dr. Alan Beer:** Yes.
- Caller:** I have few questions. The first one is if your luteal phase is longer than the 14 days, let's say it's like 16 or 17, can you, infer that you might have had an implantation failure?
- Dr. Alan Beer:** (To audience) If the luteal phase is greater than 14 days, am I suspicious to do implantation failure? (To caller) That's the only thing that can cause this to occur apart from your taking progesterone.

Caller: Okay. So I think I have had a lot of those that I didn't realize.

Dr. Alan Beer: And, in individuals that have the category five problems, if you were to do pregnancy tests on cycle day 23, 25, 27 and 29, and observe it for one hour, you would get a faint band I am nearly certain.

Caller: Well, I don't ovulate until cycle day 18 is that is that problematic?

Dr. Alan Beer: If you ovulate on cycle day 18 then you should menstruate 14 days later.

Caller: Okay. All right. Then my other question for you and I think I am going to call you to make another appointment, I've got to do IVF with Dr. Zouves. My husband's result just came back and his sperm results came back and they were poor fair to poor and his sperm results were poor with respect to motility, mobility and volume would that change your opinion at all about doing IVF?

Dr. Alan Beer: No, not at all, because Zouves will prepare the sperm, he will centrifuge it, he will wash them. He has no concerns.

Caller: I know he has no concerns but I keep hearing how many people are getting pregnant naturally, I might try to do that and save all that money, you know?

Dr. Alan Beer: I understand that. In the vast majority of the couples I see not only is the wife beat up by all the problems she has, but they begin to find things wrong with her husband and usually they'll do enough semen analysis that he's either worn out or that they find some abnormalities and give him another reason now to go to IVF ICSI. The only thing I know is that in my patients that have never been pregnant before, that have failed three IVF cycles, who have treatment, that a high percentage of those ended up getting pregnant on their own and God knows I did not tell them to go out and try.

Caller: So we have gotten pregnant on our own twice. So, you know, and I'm 41 and a half. So, I think I am going to come in and see you.

Dr. Alan Beer: Great.

Caller: Thank you.

Dr. Alan Beer: You bet.

Next caller: Dr. Beer, I just wanted to get a clarification on the time line again. I am sorry, I will just walk through what I understand the time line if you could just clarify that. So, if a patient comes to you, you would you have them do the tests, the various tests, and then you have them on treatment for let's say a month and then you clear them or whatever period of time, and then you clear them for a cycle, then they do this but they go through three cycles and then you evaluate after the three cycles if they are still not pregnant. Correct?

Dr. Alan Beer: That's correct.

Caller: And then that's probably right at the time of the 17.5 weeks. Would you then still have them try for another three or four cycles? When do you say to them okay, you know what, I am worrying about you?

Wendy Fisher: Never.

Dr. Alan Beer: Wendy says “never” and that's the right answer but you have really gotten the message, that this 17.4 week figure really surprised me. I wasn't expecting that and it tells me that although we have labeled the reproductive system broken and irreparable that we have overcalled the diagnosis in a lot of individuals. So, I would really like you to consider not doing anything until after you have served that sentence of 17.4 weeks and are still not pregnant.

Caller: Okay.

Next Caller: I have a question. If there is a patient who is on the “Olympic team” who did Humira, LIT, IVIG, fish oil, Folgard, Lovenox, the steroids is that pretty much everything, is there anything left?

Dr. Alan Beer: That's it, other than, to assume that there are upstream problems with the egg and to consider a donor egg cycle, because I know that, when that is the case, that 69 percent of individuals, who receive a donor egg fertilized by husband's sperm get pregnant in the very next cycle.

Next Caller: May I ask you a question again about the cytokine levels and the DNA damage?

Dr. Alan Beer: Yes.

Caller: I don't know if I missed what you said, but you said if the cytokines counts are too high that tells you there is DNA damage that has been done to the eggs?

Dr. Alan Beer: That is correct

Caller: What is too high to indicate DNA damage?

Dr. Alan Beer: The numbers that I consider too high is 40.

Caller: 40?

Dr. Alan Beer: Yes.

Caller: Mine is at 27 and then the second one is 18. Is that okay?

Dr. Alan Beer: Okay. Perfectly it's okay. You are not one of those patients.

Next caller: When you said it's DNA damage, does that mean that put you a higher risk of having a Down's Baby or ...?

Dr. Alan Beer: No, no. Higher risk for an early pregnancy loss or implantation failure.

Caller: Okay. Speaking of having a Down's Baby and I don't know where I read this and please tell me this isn't true, if you are homozygous for the MTHFR if you are not assimilating the folic acid like normal, does that also put you at risk for Down's Syndrome Baby?

Dr. Alan Beer: No.

Caller: It doesn't?

Male Speaker: No.

Next Caller: Dr. Beer, I have a question on serotonin.

Dr. Alan Beer: Yes.

Caller: If your serotonin levels are not okay, and you prescribe sort of an antidepressant sort of medication and don't react well to the drug, are there other holistic things you can do to boost your serotonin levels?

Dr. Alan Beer: You know, I'm becoming a firm believer in electrical acupuncture, synthetic massage which is really deep message and I refer you to the website of Zita West: www.zitawest.com. She is a naturalist that works with my patients in London and she is really the first stop because I think there is a lot of things that people can do with fish oils, some herbal substitutes that really I've seen do as well as some of the things that I have been talking about this evening.

Caller: Now, does she work with patients in the US?

Dr. Alan Beer: Yes. She does. She'll do phone consults and she has prepared actually supplements that contain the necessary natural ingredients for the infertile patients for the first trimester of pregnancy, second and third and she describes these on her web-site. But she is really is a class act and the patients that have the electrical acupuncture with her many of them stabilize their natural killer cells. It takes about 6 weeks.

Next Caller: Dr. Beer, I have a question. How, in trying to coordinate all this along with an IVF cycle, I mean the level of stress of a person is fairly high, does that in anyway of shape affect the patients response to your new treatment?

Dr. Alan Beer: When the patients stress level is high, you say?

Caller: Yes.

Dr. Alan Beer: No, you are all stressed. You know, patients have stress and they worry about it. All of my patients try and all of them are stressed. So this is the last discussion we will have about stress. The only thing that will un-stress you is the baby that you give birth.

Caller: Thank you.

Dr. Alan Beer: Well, I thank you all for keeping me awake and this has been a pretty good session and any of you that have lingering questions or any of you that are kind of listening on this session, I really want you to think about what I have said and contact me if there are further questions that you have. My e-mail address is beerdoc@aol.com just like the drink, beer D-O-C @aol "America online" . com.

Caller: Thank you very much!

Next Caller: Thanks, Dr.Beer!

Dr. Alan Beer: Bye-bye now.