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1 IN THE COURT OF COMMON PLEAS
2 OF CUYAHOGA COUNTY, OHIO

3 -----X
4 MARIA O'DONNELL, et al,

5 Plaintiff,

6 - against -

7 DAVID C. PARRIS, M.D.,

8 Defendant.

9 Case No. 414050

10 -----X

11 133 East 58th Street
12 New York, New York

13 June 4, 2003
14 10:40 a.m.

15
16 Deposition of Expert Witness,
17 BENJAMIN E. ZOLA, M.D., before Rita
18 Persichetty, a Notary Public of the State of
19 New York.

20
21
22 ELLEN GRAUER COURT REPORTING CO.
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S T I P U L A T I O N S

IT IS STIPULATED AND AGREED by and between the attorneys for the respective parties herein that the filing, sealing, and certification of the within deposition be waived.

IT IS FURTHER STIPULATED AND AGREED that all objections, except as to the form of the question, shall be reserved to the time of the trial.

IT IS FURTHER STIPULATED AND AGREED that the within deposition may be sworn to and signed before any officer authorized to administer an oath, with the same force and effect as if signed to before the court.

- oOo -

1 B E N J A M I N E. Z O L A, M.D.,
2 called as a witness, having been sworn
3 by the Notary Public, was examined and
4 testified as follows:

5 EXAMINATION BY

6 MS. HARRIS:

7 Q. Doctor, my name is Beverly Harris,
8 and I'm here on behalf of Dr. Balanson. I'm
9 going to ask you a number of questions today.
10 Since I am on the telephone, if you have any
11 problem, please let me know, okay?

12 A. Yes.

13 Q. I cannot see your responses, and so
14 if I interrupt you, that is not my intent.
15 Please stop me, okay?

16 A. Yes.

17 Q. Just before we started the
18 deposition, Howard indicated that you have a
19 new CV. I have one, would you believe, came
20 with your report sometime in 2001?

21 A. Yes, it's an old CV.

22 Q. Are there things to be added to it,
23 changed to it?

24 A. A few things probably.

25 Q. Could you give me some idea what the

Zola

1 changes would be?

2 A. Let me just look at my most recent
3 one. I'm pretty sure I know what the changes
4 are. I don't think on this CV you have my most
5 current affiliation in terms of hospitals.

6 Q. Okay. What's the difference?

7 A. On the new CV, it says year 2000 to
8 the present, although I think it's actually
9 2001 to the present. So I think that's an
10 error on this printing of the CV.

11 Q. The one I have is Lenox Hill
12 Hospital --

13 A. I'm saying 2001 to the present, that
14 takes you up to 2000.

15 Q. Still at Lenox Hill?

16 A. No, let me finish, please. Sorry.
17 2001 to the present, it should -- the new CV
18 says North Shore University Hospital at Forest
19 Hills, Director Robert Davino, M.D.

20 Q. Is that your only hospital
21 affiliation right now?

22 A. Yes.

23 Q. Anything to do with Lenox Hill
24 Hospital?

25 A. No. I mean, not officially, in

Zola

1 other words, I still send patients there and
2 work with the doctors there, but I don't
3 actually admit there.

4 Q. What else is different, Doctor?

5 A. I guess everything else looks pretty
6 up to date. I know on this is -- I don't know
7 where -- they must have pulled this off the old
8 computer or something, but I know on my most
9 recent updated CV, it also lists me as having
10 served as a member of the Aetna northeast
11 regional or tristate area, northeast regional
12 quality assurance committees, that is I sat on
13 them as a physician panelist. That's, again,
14 for Aetna, the insurance company. And also I
15 also took part in at least one -- some kind of
16 physician appeals board, so, again, northeast
17 regional quality assurance committee and at
18 least one appeals board.

19 Q. Anything else, Doctor?

20 A. I don't think so. I think
21 everything else is pretty up to date.

22 Q. In going through your CV here, can
23 you tell me why you changed from Lenox Hill
24 Hospital to North Shore Hospital?

25 A. Business reasons. Just working with

Zola

1 other doctors, other opportunities, other
2 referrals.

3 Q. Your practice is what, Doctor?

4 A. I'm a non-invasive cardiologist and
5 internal medicine office based, although I do
6 still see patients in the hospital or in the
7 emergency room, but about 60 to 70 percent of
8 what I do is cardiology in the office,
9 30 percent internal medicine, 5 to 10 percent
10 medical malpractice consulting. A couple of
11 percentage points actually seeing patients in
12 the hospital or in the emergency room.

13 Q. When you say couple percentage
14 points, how frequently do you get into the
15 hospital?

16 A. Well, if it's for half an hour a day
17 and I work at least a 12-hour day, then figure
18 out whatever that percentage is.

19 Q. So are you saying that you're in the
20 hospital every day?

21 A. No, I mean, I'm not. Sometimes I
22 am, sometimes I'm not, it just depends on who
23 is admitted and who needs to be seen.

24 Q. The patients that you see in the
25 hospital, are they patients of yours or are you

Zola

1 asked to consult?

2 A. Both.

3 Q. What percentage would be your
4 patients versus those that you have to see as a
5 consultant?

6 A. Sorry, I didn't follow that, I
7 missed.

8 Q. What percentage of the patients that
9 you see in the hospital are your patients that
10 you've elected to hospitalize for whatever
11 reason and those patients that you've been
12 asked to consult on by other physicians?

13 A. The majority would be mine. Well,
14 the majority would be mine because even if I
15 consult, I would be consulting as a
16 cardiologist and I would take over their
17 cardiology care or I already do their
18 cardiology care, even though they have an
19 internist or an internal medicine doctor.

20 So I'm not sure how to answer that.
21 It's not like it's an ownership situation. I
22 would be co-managing them with an internist or
23 just managing them alone in terms of internal
24 medicine and non-invasive cardiology. Of
25 course, if they're in the hospital having

Zola

1 invasive or interventional cardiology, then
2 there's another cardiologist involved who
3 specifically would be doing their cardio
4 catheterization or their angioplasty or a
5 surgeon involved doing their bypass surgery or
6 something like that.

7 Q. In your practice as a cardiologist,
8 are you a solo practitioner?

9 A. Yes.

10 Q. Medical practice, do patients come
11 to you just for general medical care or are you
12 seeing them incidental to a cardiac problem?

13 A. Both, but definitely a reasonable
14 percentage of that 30 percent is patients just
15 walking in off the street or, you know, making
16 appointments to see me as an internal medicine
17 doctor or as their primary care doctor. They
18 may also have cardiology problems, but I also
19 get young people having sore throats or women
20 with urinary tract infections, so it could be
21 anything.

22 Q. In reviewing your CV, I was a little
23 confused and maybe you can help me. You
24 received your medical degree at Harvard medical
25 school?

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1 A. No, if you look at the --

2 Q. Sorry, I read the wrong one. John
3 Hopkins?

4 A. Johns Hopkins University Medical
5 School.

6 Q. Then you have here Brown University
7 1980 and then Harvard again for hematology and
8 then UCL for infectious diseases. Were they
9 courses -- did they lead to specialization?
10 Explain that, if you would, please.

11 A. They're actually what they say on
12 the curriculum vitae, they were electives that
13 were done during those years while I was
14 actually in medical school at those different
15 medical schools for, say, a month at a time to
16 take different courses at those different
17 medical schools.

18 In addition, 1976 to 1977 is when I
19 was an undergraduate at Harvard University. I
20 took electives at Harvard University medical
21 school in immunology, in neural physiology.

22 Q. So when you did infectious disease
23 at UCLA, was that about a month long program?

24 A. Yes, that's when I was a medical
25 student at Johns Hopkins but doing an exchange

Zola

1 elective in infectious diseases at the UCLA
2 medical school but getting credit for it at
3 Johns Hopkins.

4 Q. Do you have any teaching
5 responsibilities today?

6 A. Not formal ones in terms of giving
7 formal lectures, but almost any time I'm taking
8 care of a patient in the hospital, I'm
9 interacting with medical students, interns,
10 residents, fellows and other attending
11 physicians, all of whom I will be discussing
12 the patient with and teaching.

13 Q. Cardiology or internal medicine or
14 any other subspecialties?

15 A. Cardiology and internal medicine.
16 Occasionally emergency medicine when I'm in the
17 emergency room and I need to be discussing the
18 case with someone in the emergency room, with
19 whoever is in the emergency room, whether it be
20 an intern, a resident, a fellow or an emergency
21 room physician.

22 Q. Does North Shore Hospital have a
23 residency or fellowship in cardiology?

24 A. There are cardiology fellows that
25 rotate through there, but it's not the official

Zola

1 residency or fellowship of that hospital.

2 Q. They rotate through what period of
3 time?

4 A. That, I don't -- I can't tell you.

5 Q. Is it rotation through full
6 cardiology, though?

7 A. You mean do -- yes, they rotate
8 through for a cardiology elective of some sort.
9 I mean, again, I'm not in charge of the program
10 or I don't really know the program, so I can't
11 tell you what their elective actually is.

12 Q. Do they have a residency program for
13 internal medicine?

14 A. I believe so since I'm dealing with
15 interns and residents that are in internal
16 medicine, but again, I don't know who
17 administers it, if they're affiliated, what
18 medical school they're affiliated with
19 specifically, who runs the program, who funds
20 it, you know, I don't know any of that stuff
21 because I'm not part of the administration
22 anymore.

23 Q. In terms of publications, Doctor, am
24 I correct that you have not published on
25 anything in the area of rheumatic heart disease

Zola

1 and/or infectious endocarditis?

2 A. I don't believe so.

3 Q. Am I also correct that you have done
4 no research in these areas?

5 A. Correct.

6 Q. Do you review echocardiograms?

7 A. Every day.

8 Q. Have you looked at the
9 echocardiogram in this case?

10 A. I've looked at three echocardiograms
11 in this case dated January 28, '99, 2/25/99 and
12 2/26/99.

13 Q. Are you presently involved in any
14 kind of research, Doctor?

15 A. I'm not a principal investigator on
16 any specific research projects. I do, however,
17 work with some of the physicians at New York
18 Hospital and also at Lenox Hill Hospital
19 enrolling my patients in their studies having
20 to do with cholesterol control and different
21 devices such as defibrillators or stents or
22 other cardiology treatments for coronary artery
23 disease.

24 Q. You indicated previously that you
25 spent about 5 to 10 percent of your time in the

Zola

1 medical legal arena. Is that reviewing cases
2 for lawsuits?

3 A. Yes, that would be reviewing cases,
4 testifying, writing reports, attorney
5 conferences.

6 Q. How many cases do you typically
7 review a year?

8 A. Probably somewhere around a case
9 every two weeks, so anywhere from 20 to 25
10 cases a year.

11 Q. What percentage for defendants, what
12 percentage for plaintiffs?

13 A. Probably about 90 percent of the
14 cases that I review are for plaintiffs, about
15 10 percent for defense firms.

16 Q. Are you listed with any services --
17 expert witness services?

18 A. I believe I am at present, but I'll
19 just give you a list of all the ones that I can
20 think of off the top of my head that have
21 listed me at various times. When I say listed,
22 I don't know exactly what they do except for
23 the fact they call me at times and say that
24 there is a case that an attorney is looking for
25 an expert witness on, would I be willing to

Zola

1 review it, so I presume they have me listed
2 somewhere, but those firms include MedQuest,
3 MacroTech, and some of these firms may not even
4 exist anymore, I don't really know, I have not
5 heard from some of them in a year or two.

6 The head of at least one of the
7 firms I know doesn't exist anymore, he is now
8 my patient. In fact, many of them become my
9 patients or constantly call me for advice, so
10 sometimes the only way I know they still exist
11 or don't, but MedQuest MacroTech, Learner's
12 Second Opinion, TAB or Technical Assistance
13 Bureau, some outfit in San Francisco like
14 Medical Forensic Specialists or something,
15 Cases Incorporated, that's a good smattering.
16 I may have left one or two out.

17 Q. You charge for reviewing records?

18 A. I charge a standard across-the-board
19 fee of \$350 an hour for all review work,
20 attorney conferences, reports.

21 MR. MISHKIND: Bev, let me interrupt
22 for one second to let you know that Paul
23 Dzenitis just walked in, he's here for Ron
24 Wilts. We had started the deposition and
25 the record should probably reflect that

Zola

1 Paul's secretary called and indicated that
2 he was hung up at the airport and that we
3 should go ahead and start the deposition.
4 We are only about 15, 20 minutes actually
5 into the depo.

6 MR. DZENITIS: Great.

7 Q. Doctor, you ended with you charged
8 350 for a report. What do you charge for
9 depositions?

10 A. Depositions are a standard fee of
11 \$2,000 for four-hour time block that I have to
12 cancel all patients and make available for the
13 deposition plus travel expenses, meaning taxis,
14 whatever, plus \$250 an hour for travel time
15 outside of the four-hour deposition.

16 Q. What about trials?

17 A. Also I should say that beyond the
18 four hours, it's \$500 an hour or any part
19 thereof that it goes over the four hours
20 because if it is going to do that and I can do
21 that for you, then I have to call the office
22 and cancel patients.

23 Trial is \$5,000 a day for a nine to
24 five day at trial plus all expenses, plus
25 travel time's \$250 an hour and I charge the

Zola

1 travel time for time I actually travel that I
2 cannot work, I don't charge for time I am
3 sleeping or eating dinner or anything like
4 that.

5 Q. How many times have you been deposed
6 say this year, the year 2003?

7 A. I couldn't tell you, I'm sure it's
8 been at least six times.

9 Q. Have you testified at any trials
10 this year?

11 A. Yes, you know, it kind of blurs
12 together, so I'm not sure what is this year and
13 what's in the fall, but I'm sure I've testified
14 at least once at trial, if not more than that.

15 Q. Have you ever reviewed a case for
16 Mr. Mishkind or anyone in his firm?

17 A. I don't believe so. I don't -- I
18 believe this is the only case I've reviewed for
19 them.

20 Q. Do you know how he got your name?

21 A. I have no idea. They contacted me
22 somewhere around early 2001 or late 2000 and I
23 have no idea how they found me.

24 Q. Have you reviewed any cases in Ohio
25 for any attorneys?

Zola

1 A. Yes.

2 Q. Do you recall who?

3 A. I know I've worked with the firm of
4 Walsky & Blue or Walsky & Barclay (phonetic), I
5 think they are now, I'm not sure what name they
6 go by now. And I've testified at trial for
7 them at least two times also, and I think there
8 is an attorney named Jeff Bowsay or something
9 like that in Columbus who used to be a defense
10 attorney and became a plaintiff's attorney and
11 contacted me after he became a plaintiff's
12 attorney and asked me to review cases for him.

13 Q. Anyone else you can think of?

14 A. They're very -- well, maybe others
15 in Ohio, that's all I can think of right now.

16 Q. When you were contacted in this
17 case, did you receive any summaries of the
18 records or anything of that sort?

19 A. I may have been just contacted by
20 telephone, I honestly don't remember what the
21 initial contact was, but what was sent to me
22 initially, I believe, were partial medical
23 records, and that's about all I can tell you.
24 I mean, I've had different things sent to me at
25 different times throughout the last two years.

Zola

1 Q. Doctor, you have a report here dated
2 January 17, 2001?

3 A. Yes.

4 Q. Is that the only report you had
5 written?

6 A. That's the only written that I've
7 generated, yes.

8 Q. Then you list nine things that you
9 have looked at?

10 A. Then those are the things that I
11 would have looked at at that time when I did
12 the report.

13 Q. Since that time, what else have you
14 reviewed?

15 A. Well, since that time, I know I got
16 more complete records from Dr. Hollin, I
17 believe I had more complete records from
18 Dr. Zirafi, Dr. Balanson and Dr. Parris or at
19 least got another set of copies maybe with some
20 sheets that were missing, and I've gotten
21 depositions since then.

22 Q. Let me stop you at those records.
23 Doctor, did you receive the complete Mt. Sinai
24 medical records, as best you could tell?

25 A. I believe so. I received an updated

Zola

1 set of records from Mt. Sinai sometime around
2 February of 2001. It's certainly a more
3 complete set of records. I can't tell you off
4 the top of my head now, I can't tell you if
5 it's absolutely everything, but it's certainly
6 more complete and certainly is -- contains, I
7 believe, everything that I need. It doesn't
8 change my opinions in the initial report, but
9 it gives me more records to bolster those
10 opinions.

11 MR. MISHKIND: Bev, so you're aware
12 also, and it's right here, I did send him,
13 just for information purposes, some of the
14 most recent records from Dr. Winkelman and
15 Dr. Perzi within the last, I don't know,
16 month or so, and he has them in the stack
17 of stuff that is in front of him.

18 Q. What depositions?

19 A. Also I -- just so you know, so
20 before I answer that question, I also have some
21 expert reports.

22 Q. We'll get to those, Doctor. Let's
23 talk about depositions first.

24 A. Depositions, I have the deposition
25 of Dr. Zirafi, the deposition of Dr. Balanson,

Zola

1 the deposition of Dr. Parris, the deposition
2 of -- I thought I had the deposition of
3 Dr. Hollin here somewhere.

4 MR. MISHKIND: You do.

5 A. I'm not sure where it is, but I know
6 I've gone over the deposition of Dr. Hollin. I
7 also have answers to interrogatories.

8 Q. From who?

9 MR. MISHKIND: From Dr. Hollin, they
10 have the full set of his records that he
11 didn't have at the time. If you recall,
12 there was the questionnaire that was
13 attached, so I sent him a copy of the
14 interrogatories with the questionnaire
15 that was filled out by Maria when she saw
16 Dr. Hollin.

17 Q. Whose expert reports?

18 A. We found Dr. Hollin's depo in my
19 pile. Did I also say Dr. Kalucis?

20 Q. No, you didn't, but I'll put it
21 down.

22 A. I have the deposition of --

23 MR. MISHKIND: Your question was
24 which expert reports, Bev?

25 MS. HARRIS: Yes.

Zola

1 A. I have expert reports from
2 Dr. Kaberline and Dr. Berkowitz and also from
3 Dr. Mitek, Dr. Lerner, Dr. Irene, Dr. McKinsey
4 and Dr. Josephson, Dr. George, Dr. Kose,
5 Dr. Resnik and Dr. Armitage.

6 Q. Anything else that we haven't talked
7 about?

8 MR. MISHKIND: Bev, he has two
9 notebooks which also include all of the
10 records from Dr. Zirafi. Sorry, you were
11 about to --

12 A. Well, I can tell you what's in the
13 two notebooks. They include records from
14 Dr. Jim Cuglewski, C U G L E W S K I, records
15 from Dr. Kalucis, K A L U C I S, records from
16 Dr. Zirafi, records from Dr. Parris, records
17 from Dr. Balanson, records from Dr. Hollin and
18 the urgent care or MedCenter.

19 Q. Did you receive any summary of the
20 records or any indexes or anything of that
21 sort?

22 A. No.

23 Q. Did you make any notes?

24 A. Yes.

25 Q. Do you have the notes with you?

Zola

1 A. Yes, I have one page of some notes
2 that's just kind of a time line and little bit
3 of a summary of some of the things from the
4 different office visits.

5 Q. When were those notes made?

6 A. In the last two or three days.

7 Q. Can you hand those to the court
8 reporter and have that marked as Exhibit 2.
9 We'll mark the new CV as 1 if we can.

10 A. Again, the CV is actually not the
11 very newest, it's almost the newest.

12 (Zola Exhibit 1, CV, marked for
13 identification.)

14 (Zola Exhibit 2, Dr. Zola's notes,
15 marked for identification.)

16 A. Also in terms of the notebook, there
17 are some selected Metro Health Medical Center
18 records in terms of admission and discharge
19 summaries going from March of '99 up until
20 February of 2000. That's in one of the
21 volumes. I think the other volume is just
22 Mt. Sinai Hospital medical records pertaining
23 to 2/24/99 to 3/11/99.

24 Q. Doctor, would you hand -- the court
25 reporter has handed you Exhibit 2, which is

Zola

1 notes that you referred to, it's one page.

2 A. Right.

3 Q. That was made about two to three
4 days ago?

5 A. Within the last two to three days.
6 Some of them I added early this morning.

7 Q. Would you hand them to Nancy Moody
8 so she can rereview it?

9 MR. MISHKIND: She actually already
10 has.

11 MS. MOODY: I have looked at it,
12 Bev.

13 Q. Doctor, did you make any marks on
14 the records or depositions or, you know,
15 anything of that sort?

16 A. Just underlinings and highlights, I
17 believe. Miss Moody has looked through it
18 so...

19 Q. I'll leave that to her then.

20 A. She would know what I did. I think
21 it's just highlights pretty much, right.

22 Q. Doctor, would you define for me what
23 infectious bacterial endocarditis is?

24 A. Bacterial endocarditis means a
25 bacterial infection of the heart usually

Zola

1 involving the valves at first and then
2 sometimes spreading from the valves into the
3 cardiac tissue, but it basically means
4 bacterial infection of the heart itself.

5 Q. What is rheumatic heart fever, if
6 you can define it?

7 A. Well, you mean rheumatic fever or
8 you mean rheumatic heart disease?

9 Q. Rheumatic heart disease is probably
10 better.

11 MR. MISHKIND: I was wondering what
12 you were talking about.

13 A. Rheumatic heart disease implies that
14 the patient has had an episode of rheumatic
15 fever -- an episode or episodes of rheumatic
16 fever that has left their heart damaged in some
17 way from that rheumatic fever. Oftentimes with
18 scarring, thickening, nodulate, leak or
19 blockage of the heart valves, but also with
20 some, the same thing potentially occurring in
21 the heart tissue that is the muscular tissue.

22 Q. What are the signs and symptoms of
23 bacterial endocarditis?

24 A. The signs and symptoms of bacterial
25 endocarditis can be a whole myriad of things, a

Zola

1 lot of different things, but they'll frequently
2 involve the typical signs and symptoms of any
3 infection, fevers, chills, aches, weakness,
4 fatigue, weight loss, and then all sorts of
5 other things depending on how the bacterial
6 endocarditis progresses, how it spreads,
7 whether or not pieces of infected material
8 break off from the heart and/or its valves and
9 spread to the rest of the body.

10 If a piece breaks off and goes to
11 the brain and blocks an artery feeding blood
12 there, it will cause a stroke. If it goes to
13 the heart artery, it will cause a heart attack.
14 If it goes to the finger, it will frequently
15 cause an area of finger death or finger attack.
16 And also, any infected material that breaks off
17 from the valve and goes somewhere in the body
18 will not only damage that part of the body but
19 frequently spread the infection to that area of
20 the body. Those would be some of the typical
21 things that would occur with endocarditis.

22 Q. Would you define what it means to
23 have vegetation on the valves?

24 A. Vegetation is what's used to
25 describe a growth of inflammatory tissue and

Zola

1 infection that is bacterial growth literally
2 growing like a vegetable or looking like a
3 nodule or a little piece of infected material
4 growing on the valve or on the heart somewhere.

5 Q. How does one get vegetation on the
6 valves?

7 A. One gets vegetations by having an
8 infection on the valve and then by having an
9 immune system that mounts an immune response
10 to try to fight that infection. So it's a
11 combination of the infection and the body
12 attempting to ward off that infection.

13 In other areas of the body if
14 there's an infection, the body will surround it
15 with scar tissue or attempt to surround it with
16 scar tissue to wall off and form an abscess.
17 You can't -- it's very difficult to form an
18 abscess on a valve, but in a sense that's what
19 a vegetation is, it's like an abscess like
20 growth that's growing right on the tip of the
21 valve.

22 Q. How does one get the infection on
23 the valve?

24 A. By bacteria floating through the
25 bloodstream and sticking to and invading the

Zola

1 valve itself. That usually only happens when
2 there's been some sort of damage to the valve
3 making it susceptible to being infected and
4 usually also only when there is a leak or
5 abnormal blood flow creating a high-speed jet
6 of blood flowing in one direction or another
7 next to the valve causing some fibrin-like
8 tissue, fibrin being a protein in the blood,
9 but causing protein to stick to that valve at
10 that point making it more susceptible to also
11 having bacteria stick to the valve at that
12 point.

13 Q. How does one diagnose bacterial
14 endocarditis?

15 A. It is diagnosed made on a base of a
16 variety of things, but mostly by blood culture
17 and the presence of symptoms of an infection
18 and often the detection of abnormalities on the
19 valves of the heart or in the heart itself that
20 is evidence of an infection of the heart or its
21 valves.

22 Q. How do you determine evidence of an
23 infection of the heart or valve?

24 A. By performing some sort of imaging
25 study such as an echocardiogram.

Zola

1 Q. Can we agree, Doctor, that the fact
2 that one has had rheumatic fever which has
3 caused some damage to the heart valve, that
4 patient can have an infection which does not
5 involve the valve?

6 A. I'm not -- I don't understand your
7 question. You asked -- you're asking something
8 that is obvious, any patient with damage to the
9 valve can have an infection, she can have a
10 runny nose and cause a cold. Do you mean an
11 infection of the heart or the heart valve? You
12 have to be more specific in what you're asking.

13 Q. The fact that a patient has had
14 damage to the valve through rheumatic heart
15 fever, rheumatic fever, does not preclude that
16 patient from having an infection going on in
17 the body unrelated to the valve, correct?

18 A. Correct.

19 Q. Can we agree that if you have an
20 infection unrelated to the valve, one can have
21 fever, weakness and fatigue?

22 A. Yes, but at the same time in a
23 patient with rheumatic heart disease and damage
24 to their valve, any infection anywhere in that
25 patient's body is at risk to spread to the

Zola

1 valve because most, if not all, infections in
2 the body have the ability to send the infected
3 material into the bloodstream, and once in the
4 bloodstream, bacterial infections in
5 particular, when the bacteria get into the
6 bloodstream, they can stick to that valve, so
7 any infection anywhere in the body is
8 automatically a high risk for a patient with
9 rheumatic heart disease, that is a high risk
10 for them developing an infection on their heart
11 valves secondary to that infection anywhere
12 else in the body.

13 Q. Can we agree that then the goal of
14 a -- with a patient such as that is to treat
15 the infection before it spreads to the valve?

16 A. Correct, yes.

17 Q. Am I correct that the way one would
18 treat the infection is to prevent the spread to
19 the valves through the use of antibiotics?

20 A. Yes, provided that we are talking
21 about a bacterial infection.

22 Q. I stand corrected. As long as we
23 are talking about a bacterial infection, the
24 goal is to treat that infection with
25 antibiotics hopefully to preclude it spreading

Zola

1 to the valve?

2 A. That is correct.

3 Q. Am I correct -- and let's assume for
4 the sake of this question, I'm talking about
5 bacterial infections, Doctor.

6 A. Sorry, it came through jumbled, but
7 did you say we should assume from now on any
8 infection we discuss is going to be a bacterial
9 infection?

10 Q. Yes. Can you do that?

11 A. Yes, I can.

12 Q. If you assume that we are talking
13 about a bacterial infection that has not spread
14 through the bloodstream to the valve and we
15 also assume that the goal was to prevent that
16 from occurring by using antibiotics, can we
17 agree that the antibiotics chosen are usually
18 chosen empirically?

19 A. Your question is a little bit broad
20 and nonspecific, but I believe the answer is
21 yes, that is, any infection anywhere in the
22 body that is bacterial will frequently be
23 treated empirically, that is treated based on
24 the most likely organisms that are there with
25 antibiotics to cover the most likely organisms

Zola

1 without necessarily getting a culture or
2 without necessarily identifying each and every
3 bacterium that is actually involved in the
4 infection.

5 Q. In patients who have had valvular
6 damage from rheumatic heart disease, do those
7 patients require prophylactic antibiotics every
8 time they develop fever?

9 A. Not necessarily. However, the
10 suspicion and the worry about them developing
11 bacterial infections has got to be extremely
12 high and part of the standard of care would be
13 that physicians treating those patients should
14 err on the side of treating them with
15 antibiotics rather than err on the side of not
16 treating them with antibiotics.

17 Q. In a situation where a patient has a
18 fever but it has not spread to the valve, what
19 antibiotics would one choose?

20 A. Your question doesn't make any sense
21 because, again, it all depends on what the
22 infection is, where it is, what the suspected
23 bugs are, so the antibiotics would be
24 appropriate to the given circumstances.

25 Q. The patient was complaining of

Zola

1 fever, weakness and general malaise?

2 A. If the patient was complaining of
3 fever, weakness and general malaise and nothing
4 else and no other source of an infection could
5 be identified, then it would be extremely
6 important to rule out an infection in the
7 bloodstream and the heart valves as the source
8 and cause of those symptoms and findings, and
9 therefore, do blood cultures and be ready to
10 treat that patient based on their clinical
11 course and possibly results of blood cultures
12 and/or other blood testing and/or other
13 diagnostic testing also such as
14 echocardiograms.

15 Q. Doctor, what is -- what is generally
16 referred to by the lay public as the flu?

17 A. Is this supposed to be an expert
18 opinion as to what the lay public refers to?

19 Q. No, I'm using the term "flu." Do
20 you use that term?

21 A. I do usually when it means
22 influenza, but I believe that the lay public
23 frequently refers to flu-like symptoms when
24 they're talking about almost any viral illness.

25 However, flu-like symptoms can also

Zola

1 occur with any bacterial illness.

2 Q. In dealing with flu-like symptoms,
3 how would you make a determination that it was
4 due to a viral or bacterial infection?

5 A. It's based on a combination of the
6 patient's clinical presentation, blood testing
7 and potentially other types of testing such as
8 chest x-rays or echocardiograms.

9 Q. If one believes one has a viral
10 origin with flu-like symptoms, does standard of
11 care require that blood tests and chest x-rays
12 be done?

13 A. I can't answer your question the way
14 you've asked it because there is a presumption
15 in it that has nothing to do with medicine. It
16 is not a matter of -- so I'll try to answer the
17 best way I can, but it's not a matter of if one
18 believes it's viral.

19 The idea is in a patient like this,
20 in a patient like Maria O'Donnell who has
21 underlying rheumatic heart disease and
22 therefore is known to be at greatly increased
23 susceptibility to developing bacterial
24 infections on her heart valve which can be
25 potentially devastating or lethal, the

Zola

1 obligation of the treating physician is not to
2 believe that a patient has a viral illness and
3 treat her accordingly, it is rather to make
4 sure that a differential diagnosis is produced
5 of the different things that can be occurring
6 with a patient and diagnostic testing be done
7 to determine what is actually going on with the
8 patient and to treat the patient whenever
9 possible or necessary for more serious
10 infections based upon that testing and its
11 results.

12 So in other words, the idea is not
13 to necessarily come up with an answer that the
14 doctor believes in and follow that course, but
15 rather to have a differential diagnosis, have
16 it working that there are many things that
17 could be going on and that testing be done to
18 try to differentiate between the many things,
19 but if that differentiation cannot be made,
20 rather than having a belief or making an
21 educated guess in one way or the other, the
22 patient should be treated in a way that
23 protects the patient from the more serious
24 problem such as endocarditis, and again, that
25 gets back to what I said before about erring on

Zola

1 the side of treating with antibiotics rather
2 than not treating with antibiotics.

3 Q. Doctor, am I hearing you correctly
4 that a patient who has had rheumatic heart
5 disease who has then had valve damage, that
6 every time that patient develops a fever
7 malaise, a workup has to be done including
8 blood cultures?

9 A. No, not necessarily every time;
10 however, especially in any patient with
11 recurrent fevers, with prolonged fever, with
12 exceptionally high fever, a blood culture is
13 just literally a couple ounces or even an ounce
14 of blood that is taken out and put into a
15 culture bottle.

16 So given the fact that developing
17 endocarditis is potentially lethal or
18 devastating and given the fact that a patient
19 with rheumatic heart disease has the potential
20 for having the devastating and life-threatening
21 infection, whenever a patient with rheumatic
22 heart disease has a fever or a fever pattern
23 suggestive of the possibility of endocarditis,
24 a blood culture should be done, or not just a
25 blood culture but blood cultures and blood

Zola

1 testing should be done.

2 Now, if a patient has one fever and
3 feels perfectly fine and goes to the doctor two
4 weeks later and reports that two weeks ago that
5 they had a fever for one day and has absolutely
6 no symptoms anymore, then blood cultures are
7 not necessary at that point in time. So this
8 is not an all-inclusive sort of thing.

9 You have to look at the situation at
10 any given moment and/or over time to determine
11 when to do blood cultures in a patient with
12 rheumatic heart disease that has had a fever.
13 There is a very big difference between a
14 patient that has a fever that is ongoing or
15 intermittent over twelve days and a patient
16 that has a fever that's only 100.5 degrees for
17 one day and feels perfectly fine otherwise and
18 has had nothing happen for a week. So it just
19 depends on the situation.

20 In a patient with an extremely high
21 fever, such as 103.8 the way this patient had,
22 that's extremely worrisome, and in a patient --
23 not just in a patient like Maria O'Donnell but
24 literally specifically in Maria O'Donnell, when
25 she presented with a fever of 103.8, the risks

Zola

1 of her having underlying endocarditis were,
2 without question, high enough that blood
3 testing needed to be done at that point in time
4 to be -- to help to diagnose whether or not she
5 had underlying endocarditis.

6 Q. In your opinion, Doctor, when did
7 she develop endocarditis?

8 A. In my opinion, I believe she
9 developed the endocarditis sometime after
10 12/15/98, that is I believe she either
11 developed the endocarditis from bacterial
12 seeding or showering through her bloodstream
13 from the scope that was done by Dr. Kalucis, or
14 sometime after that, some local infection that
15 she had either in her throat, her mouth or her
16 nose or sinuses seeded bacteria through her
17 bloodstream onto her heart valve and she
18 started her infectious endocarditis illness and
19 it became subacute, that is it became an
20 illness that the bacteria were growing on the
21 valve, but the course of that illness was such
22 that it was getting better, getting worse,
23 getting better, getting worse and at times was
24 partially treated with antibiotics.

25 Q. I'm going to get you out of order,

Zola

1 Doctor, so bear with me, please. She received
2 doxycycline and she also received Biaxin, and
3 as I understand it, you have reviewed the
4 Mt. Sinai records; is that correct?

5 A. That's correct. She received
6 doxycycline for a ten-day period from
7 February 8th onwards.

8 Q. And then she was also receiving
9 Biaxin, correct?

10 A. Then from, I believe, the 18th very
11 late at night, so maybe starting on the 19th is
12 when she started taking Biaxin. I don't
13 believe she took the Biaxin until after she
14 actually called Dr. Parris at approximately
15 one o'clock in the morning on the 19th.

16 Q. Would those -- would the bacteria be
17 sensitive to those drugs?

18 A. I'd have to go back and look
19 specifically, but it doesn't really matter if
20 it were to be sensitive or not sensitive
21 because in endocarditis, because the bacteria
22 is in a pocket or a ball or a nodule,
23 antibiotics by mouth will most of the time not
24 be sufficient enough to treat and cure the
25 endocarditis. The endocarditis has to be

Zola

1 treated with very high levels of intravenous
2 antibiotics in order to ensure adequate
3 penetration of the antibiotic into the infected
4 area in order to sterilize it and kill the
5 bacteria.

6 So what frequently will happen is
7 antibiotics that are given by mouth when the
8 patient has underlying subacute bacterial
9 endocarditis will frequently suppress it,
10 change its course, but not cure it.

11 Q. The question again is, were the two
12 drugs given sensitive to those drugs so that it
13 would change the course?

14 A. To answer that question, you can
15 turn to the hospital records from Mt. Sinai and
16 look at the microbiology blood culture reports
17 from the initial blood cultures to see that the
18 bacteria strain -- the bacterial strain that
19 grew on the valve was Strep. mitis, a viridans
20 group that was resistant to tetracycline, and
21 doxycycline is essentially a form of
22 tetracycline, so the doxycycline did not likely
23 kill the strep bugs that were on the valve,
24 although they might have suppressed it a little
25 bit.

Zola

1 In order words, these sensitivities
2 are basically what kind of concentration you
3 need to actually inhibit growth, so it might
4 have inhibited it a little bit, but it
5 certainly wouldn't likely have treated it
6 effectively.

7 I think that the -- that Strep.
8 mitis is likely to have been at least somewhat
9 sensitive to the Biaxin, although it's not
10 specifically listed on this sensitivity
11 profile, but also that Biaxin is not known to
12 be effective or, I should say, is known
13 specifically to not be effective treatment for
14 this kind of subacute bacterial endocarditis,
15 so again, although the Biaxin likely would have
16 helped suppress things, it certainly would not
17 have effectively and/or adequately treated the
18 infection, and so the infection would have
19 continued while the patient was taking Biaxin.

20 Q. How long does it take to sterilize
21 the patient?

22 A. That's different for every patient.
23 The standard of care is to treat a patient with
24 endocarditis for a minimum of four weeks of
25 intravenous antibiotics. That is, treating for

Zola

1 two weeks will only sterilize perhaps 70 to 80
2 percent of patients. I mean, I don't know the
3 specific numbers, I don't have them on the top
4 of my head, but I'm giving you an example.

5 The idea is that the shorter periods
6 of time treating with antibiotics are not
7 likely to sterilize everybody, so it's only
8 four weeks of antibiotics that is likely to
9 sterilize more than, say, 95 to 98 percent of
10 patients with endocarditis, but it's not just
11 four weeks of antibiotics, it's at least four
12 weeks of antibiotics with other indicators that
13 the patient's valve has possibly been
14 sterilized, such as follow repeat
15 echocardiograms, sedimentation, CBC, repeat
16 blood cultures, in other words, doing other
17 testing also to be certain that the patient
18 doesn't still have bacteria that are alive and
19 infecting the heart or heart valves.

20 Q. Am I correct, Doctor, I'll try to
21 sum up what I think you said, that it will take
22 approximately two weeks in a minimum to reach
23 almost all of the bacteria being eradicated?

24 A. No, that's not what I said at all.

25 Q. Okay. What did I miss, the bacteria

Zola

1 will continue to be there up to two weeks?

2 A. No, my answer stands the way I
3 answered it. You've just paraphrased it
4 completely wrong. I'll try to say it again
5 without having to repeat my entire answer, but
6 the bottom line is there will be some patients
7 that have less infected material and they may
8 respond to two weeks of antibiotics. However,
9 there will also be patients such as Maria
10 O'Donnell who will have much more infected
11 material, and they are more likely to require a
12 minimum of four weeks of antibiotics to be
13 sterilized. It will be different for every
14 patient.

15 Q. In Maria O'Donnell's case, on the
16 24th of February, am I paraphrasing this
17 correctly, that she would more likely need four
18 weeks of treatment to completely sterilize all
19 the bacteria?

20 A. More likely than what, more likely
21 to need four weeks than what?

22 Q. Than not.

23 A. Yes, on the 24th, Maria O'Donnell
24 more likely than not needed four weeks of
25 intravenous antibiotic therapy to sterilize the

Zola

1 valve.

2 Q. Am I also correct that even though
3 the valve has been sterilized, the vegetation
4 remains?

5 A. No, what you've said is not true.
6 Maria O'Donnell had a vegetation that was
7 mobile, that means it had a stalk, it was
8 flapping around in the breeze. When she had an
9 echocardiogram performed on February 25 in the
10 hospital, that vegetation subsequently broke
11 off, floated downstream and went to her brain
12 where it caused a stroke, so that vegetation
13 was no longer on her valve because, of course,
14 it caused her stroke.

15 However, she had other vegetations
16 on the valve, that is other infected areas on
17 the valve that were growing as vegetations, and
18 those areas were sterilized with the four weeks
19 of antibiotics that she received by vein in the
20 hospital and/or the center she was sent to
21 afterwards, but there's still residual scar
22 tissue that was left behind afterwards.

23 Q. Doctor, I don't think my question
24 was clear, and I apologize. Assuming that the
25 vegetation hadn't broken off, assume the

Zola

1 patient with vegetation on the valve, if you
2 give them a course of antibiotics, the
3 vegetation remains, although it becomes
4 sterile; is that a fair statement?

5 A. Although it becomes?

6 Q. Sterile.

7 A. No, that's not completely true
8 because the vegetation is made up of a mass of
9 infected material, inflammatory material and
10 scar tissue, and so as you kill the bacteria,
11 you remove the bacteria from the vegetation, as
12 you kill the bacteria and sterilize it,
13 inflammation in the area also goes down. So
14 vegetations will frequently shrink and/or
15 possibly resolve depending on how big they are,
16 but yes, there always will be some residual
17 scar tissue left afterwards. It's just a
18 question of how much is actually left
19 afterwards depending on how it heals.

20 Q. Is there any rule of thumb as to how
21 long it takes vegetation to shrink and/or
22 resolve?

23 A. It will shrink and tend to resolve
24 over that four-week period, but it may -- it,
25 of course, will continue to shrink after it's

Zola

1 sterile, possibly for many months afterwards,
2 just the way any scar tissue continues to
3 shrink.

4 Just like if you have a scar or a
5 cut on your skin, even though it looks healed
6 over after a couple of days, it may take many
7 weeks or months before the scar is really truly
8 very small and overwhelmingly healed, and any
9 scar that forms does tend to shrink a little
10 bit over many years even though that amount of
11 shrinkage may be very, very small after the
12 first couple weeks and/or couple months.

13 Q. Am I correct, though, that even with
14 the antibiotics and the bacteria -- the
15 vegetation being sterilized --

16 A. Sorry, before you go any further,
17 some of your words -- you may as well start
18 again.

19 Q. Sure. It wasn't going to be a good
20 question, so I'll back up, Doctor.

21 MR. MISHKIND: I was going to object
22 anyway, so you might as well start over.

23 Q. Am I correct that even if the
24 vegetation has been sterilized through the use
25 of antibiotics, that the sterile vegetation can

Zola

1 break off and result in if it goes to the
2 brain, a stroke or to the heart a heart attack?

3 MR. MISHKIND: Objection, but go
4 ahead.

5 A. Yes, I believe the answer is yes to
6 the way you've asked the question, and if we
7 make it a little bit more specific and
8 anticipate your question for this case, I
9 believe for this case specifically that by the
10 24th, this patient had a vegetation that was
11 mobile and needed to be treated with
12 antibiotics almost immediately upon being seen
13 in the emergency room. And when I say almost
14 immediately, I mean as soon as three sets of
15 blood cultures were drawn, which should have
16 occurred within an hour or maybe two hours of
17 her actually coming through the emergency room,
18 so antibiotics should have been started by
19 approximately two hours of this patient being
20 admitted to the hospital.

21 Had those antibiotics been given at
22 that time and they would have been given
23 empirically, that is without knowing what bug
24 was involved, but she would still have been
25 started on exactly what she was put on later

Zola

1 essentially empirically, which would have been
2 vancomycin and genomycin, and if those
3 antibiotics had been started within two hours
4 of her being admitted to the emergency room,
5 then within a reasonable degree of medical
6 certainty or more likely than not that would
7 have diminished the likelihood of her having
8 had that vegetation break off and having had
9 the stroke that she had.

10 Now, at the same time, I cannot say
11 that more likely than not had she been treated,
12 she would not have had the stroke. I can only
13 say more likely than not the chance of her
14 having that stroke would have been diminished.
15 Was that clear enough?

16 Q. So in other words, vegetation could
17 have still broken off more likely than not?

18 MR. MISHKIND: Objection to the form
19 of the question, but go ahead.

20 A. I can't answer it the way you've
21 asked it.

22 Q. Am I correct that if she had been
23 started --

24 A. Sorry, I'm sorry, I'm still thinking
25 I can actually answer it the way you've asked

Zola

1 it, the answer is no. I'll say it again, more
2 likely than not, her chance of having a stroke
3 would have been diminished. I cannot say more
4 likely than not it would not have happened.
5 That means I also cannot say more likely than
6 not that it would have happened. It doesn't
7 mean that, but I mean it. So I just can't give
8 you a specific percentage of the likelihood of
9 her having had a stroke if she had been treated
10 within a couple of hours with antibiotics after
11 being admitted to the hospital.

12 I can only tell you that the
13 likelihood of her having had a stroke would
14 have been significantly decreased, and that
15 statement is within a reasonable degree of
16 medical certainty or more likely than not. For
17 instance, to make it clearer since there seems
18 to be confusion here, it's possible that she
19 had a 50/50 chance of having had a stroke at
20 that point in time, and that's why I can't
21 answer more likely than not one way or the
22 other she would or wouldn't have had a stroke
23 if she had been treated with antibiotics.
24 However, as I said already a couple times, if
25 she had been treated with antibiotics, whatever

Zola

1 the percentage chance she had of having a
2 stroke would have been diminished.

3 Q. You have a patient who you suspect
4 may have a bacterial endocarditis. Do you call
5 in consultants such as infectious disease
6 specialists?

7 A. Yes, I frequently will. In fact, I
8 take it back, I almost always will. The
9 infectious disease consultants will be
10 especially helpful at calling the microbiology
11 lab, finding out what the bugs are, what the
12 sensitivities are and helping to adjust the
13 dose of antibiotics and will also play a
14 crucial role in helping to choose the proper
15 antibiotics.

16 This doesn't mean that I don't know
17 which antibiotics to treat the patient with.
18 It just means I try to get the very best
19 medical care for my patients, so I will usually
20 involve an infectious disease specialist to
21 help me achieve that and to help me with some
22 of the work as I've already described.

23 Q. Would it be appropriate in keeping
24 with the standard of care if Dr. Balanson
25 contacted an infectious disease specialist to

Zola

1 assist you in the management of this patient?

2 A. Absolutely.

3 Q. In keeping with the standard of care
4 for Dr. Balanson, should have contacted a
5 cardiologist to help her in the management of
6 this patient?

7 A. Absolutely; however, given the fact
8 that this patient -- that the working diagnosis
9 of this patient when the patient was admitted
10 was infectious endocarditis, both the
11 cardiologist and the infectious disease
12 specialist should have been contacted right
13 away and should have been involved in the
14 decision-making process right away.

15 Q. Do you know when they were called?

16 A. I believe they were -- well, I can
17 only tell you that -- I'm sorry, they should
18 have been called and seeing the patient or had
19 input into the patient's care right away. I
20 can only tell you that both of them were
21 involved in the patient's care the next day
22 after the patient was admitted.

23 Q. Do you see Dr. Balanson's office
24 record?

25 A. Do I see or did I see? Yes, I did

Zola

1 see.

2 Q. Are you aware that she called them
3 from her office while the patient was en route
4 to the hospital for advice?

5 A. Do you want to point me to something
6 specific in the medical records? In her note
7 on 2/24/99 it says, I did discuss this with
8 Dr. Cuglewski and Dr. Mosto, so I did believe
9 she did discuss the case with those two doctors
10 on 2/24/99.

11 Q. Are you aware that that was after
12 she made the impression of endocarditis and had
13 the patient sent to the hospital that she had
14 those phone calls?

15 A. I believe so, that's what it looks
16 like here, yes.

17 Q. Were you aware that Dr. Cuglewski,
18 I'm not sure if I'm saying this correctly,
19 recommended that antibiotics not be started
20 after three sets of blood cultures from 24
21 hours to 48 hours apart?

22 A. Actually we have a variety of
23 different recommendations being made by
24 Dr. Cuglewski and his team, so you can look at
25 all the different notes that were done to try

Zola

1 to put all of them together but -- and if you
2 want, I'll go through that with you right now
3 in terms of answering your questions.

4 Q. The progress notes, Dr. Cuglewski's
5 progress notes?

6 A. His progress note on 2/25/99.

7 Q. That's the one I'm referring to.

8 A. Reads, will repeat additional blood
9 cultures in next 24 hours and decide on
10 antibiotic therapy.

11 In addition, there is a consult
12 sheet that was filled out that was performed by
13 Dr. Cuglewski and whoever his associate, in
14 which the recommendation was made initially
15 after blood cultures, should treat with
16 antibiotics until blood culture results back
17 and adjust medicines, and then that note is
18 followed up by Dr. Cuglewski saying, see
19 progress notes, so there is, if not an actual
20 contradict in what is written, there's a slight
21 change in terms of, and I should say, a change
22 and a vagueness in terms of what's actually
23 written in terms of when antibiotics should be
24 started.

25 I believe that it's very clear and I

Zola

1 agree with the fact that antibiotics should be
2 started after three sets of blood cultures were
3 done, and as I've already said, those three
4 sets of blood cultures could have been done
5 within the first couple of hours from when the
6 patient first got to the emergency room. I
7 think it's a deviation from the standard of
8 care in Maria O'Donnell to have waited for
9 anything beyond those first two hours to
10 actually start her on antibiotics.

11 Q. Well, Doctor, did Dr. Balanson who
12 contacted the infectious disease specialist
13 immediately have a right to rely on his
14 recommendations as to what to do regarding
15 antibiotics and blood cultures?

16 A. Up to a certain point. At the same
17 time, Dr. Balanson is a treating physician and
18 she should be aware of how to treat infectious
19 endocarditis and how to treat infections in
20 patients that have history of rheumatic heart
21 disease and recurrent fever the way this
22 patient had.

23 In addition, on the 25th -- on the
24 25th of February in 1999, she was called by
25 Dr. Mosto and informed of the fact that the

Zola

1 patient had a vegetation on the mitral valve.
2 So especially by that time she knew that this
3 patient undoubtedly had endocarditis and had a
4 very high-risk state for having a stroke being
5 that the patient had a vegetation that was
6 actually mobile or flopping around in the
7 bloodstream on that mitral valve.

8 Q. Doctor, I also note that she called
9 Dr. Cuglewski immediately after hearing from
10 Dr. Mosto?

11 A. I believe that's in her note also,
12 yes.

13 Q. Are you saying that Dr. Balanson
14 should have overruled the specialist in
15 infectious disease and gone ahead and treated
16 this patient even though he did not want it to
17 be at that time?

18 A. It's not a matter of overruling,
19 it's a matter of the two of them treating the
20 patient in an appropriate manner. She is an
21 internal medicine physician that is in charge
22 of this patient's care; and therefore, she
23 along with Dr. Cuglewski need to make the
24 decision as to how to treat the patient. And
25 the standard of care in a patient that is

Zola

1 infected the way that this patient was and
2 in -- especially in a patient with a known
3 mobile vegetation is that the sooner and
4 quicker a patient like this receives
5 antibiotics, the more likely they are to do
6 well.

7 Q. Well, Doctor, let me go back to my
8 question then. If Dr. Cuglewski felt that this
9 patient should not be treated immediately but
10 wait until another set of blood cultures were
11 gotten, did Dr. Balanson have an obligation to
12 adhere to that advice?

13 A. If you want to put it that way, then
14 Dr. Balanson had an obligation to draw another
15 blood culture, that takes all of five minutes,
16 and then to treat the patient with antibiotics.

17 Q. Did Dr. Balanson have an obligation
18 to overrule any clinical advice given by
19 Dr. Cuglewski and go away and treat this
20 patient?

21 A. Again, it's not a matter of
22 overruling but, yes, if Dr. Cuglewski gave
23 advice that flies in the face of standard
24 medical care, then it is her obligation to
25 practice medicine within the standard of care

Zola

1 and treat this patient with antibiotics.

2 Q. Well, are you saying then that
3 Dr. Cuglewski deviated from the standard of
4 care in this case as well?

5 MR. MISHKIND: Objection.

6 Go ahead.

7 A. In terms of his recommendation to
8 wait on giving antibiotics to this patient,
9 yes, I believe he did.

10 Q. Do you disagree with the
11 recommendation that the blood cultures should
12 be done three hours apart?

13 A. Yes, the blood cultures are merely a
14 matter of drawing a certain amount of blood to
15 increase the likelihood of detecting bacteria
16 in the bloodstream and growing them out. So
17 there was no need to wait further and draw
18 other cultures before starting the patient on
19 antibiotics, rather the need was to draw the
20 blood cultures over a relatively short period
21 of time, get all the blood cultures in and
22 start treating the patient with antibiotics.

23 Q. So the advice on 2/25 at 3:00 p.m.
24 by Dr. Cuglewski to receive blood cultures in
25 the next 24 hours is improper medical care?

Zola

1 MR. MISHKIND: Objection.

2 Go ahead.

3 A. Yes, in the sense that it deviates
4 from what the standard of care would be at that
5 point in time. Now, again, I'm not sure -- you
6 said 3:00 p.m., so I'm not positive if at
7 3:00 p.m. he knew about the vegetation that
8 Dr. Mosto had seen on the patient valve.

9 Knowing about the vegetation makes
10 it that much more imperative that this patient
11 be treated with antibiotics right away;
12 however, it doesn't change what I said before,
13 that the patient should have been treated with
14 antibiotics empirically after a couple of hours
15 after being admitted to the hospital.

16 Q. Did Dr. Mosto deviate from the
17 standard of care when did he not come in
18 immediately and do the echocardiogram?

19 MR. MISHKIND: Objection.

20 Go ahead.

21 A. No, I don't believe so because the
22 echocardiogram was not ordered that way.

23 Q. Sorry, I don't understand that
24 answer. Can you explain it?

25 A. Meaning that unless Dr. Balanson

Zola

1 directed him to both see the patient and do an
2 echocardiogram as an image, then he did not
3 deviate from standard of care.

4 Q. If Dr. Mosto knew on the afternoon
5 of the 25th when the patient was admitted to
6 the hospital that Dr. Balanson expected
7 endocarditis, did he have an obligation in
8 keeping with the standard of care to come in
9 immediately to do an echocardiogram to assist
10 in the diagnosis?

11 MR. MISHKIND: Objection.

12 Go ahead.

13 A. Your question doesn't make sense
14 because he did do an echocardiogram on the
15 25th.

16 Q. Sorry, I had the wrong date. On the
17 24th at 5 p.m. when Dr. Balanson talked to
18 Dr. Mosto and told him of her suspected
19 diagnosis, did he have an obligation to come in
20 immediately and perform the echocardiogram?

21 MR. MISHKIND: Objection.

22 Go ahead.

23 A. No, he did not because doing the
24 echocardiogram or not doing the echocardiogram
25 did not change what needed to be done for this

Zola

1 patient. That is, the patient needed to have
2 blood cultures done, at least three sets, and
3 within two hours or so started on empiric
4 antibiotic therapy for infectious endocarditis
5 or other deep-seated infection, and having done
6 the echo or not doing the echo wouldn't have
7 changed that; and therefore, it was perfectly
8 within the standard of care and appropriate to
9 have done the echocardiogram on the next day.

10 And again, as I said before, even
11 the findings on the echocardiogram did not
12 change what the standard of care dictated
13 should have been done for this patient, it only
14 bolstered it and made it that much more
15 important that the patient be started on
16 antibiotic therapy.

17 Theoretically, the patient should
18 have already been on that antibiotic therapy by
19 the time the echocardiogram was done, but once
20 the echocardiogram was done on the 25th and the
21 patient was still not on antibiotic therapy, it
22 made it that much more imperative that the
23 patient be started on empiric antibiotic
24 therapy.

25 Q. You then disagree also and feel that

Zola

1 Dr. Cuglewksi deviated from the standard of
2 care when he wanted to have the results of the
3 blood culture back before starting treatment?

4 MR. MISHKIND: Objection.

5 Go ahead.

6 A. Yes, I've already answered that
7 question and I've already said yes, he did
8 deviate from the standard of care by wanting to
9 wait for the blood culture results back before
10 treating this patient with antibiotics.

11 Q. Did he also deviate from the
12 standard of care by not recommending starting
13 antibiotics before the results were back?

14 A. Yes.

15 Q. Do you know anything about
16 Dr. Cuglewski's background?

17 A. I don't believe so. It's
18 possible -- well, I mean, with exception of --
19 no, actually, I don't recall reading anything
20 about his background.

21 Q. Are you aware that he's a infectious
22 disease specialist?

23 A. With the exception of him being an
24 infectious disease specialist?

25 MR. MISHKIND: Are you aware that he

Zola

1 was an infectious disease specialist, I
2 believe that was the question.

3 A. Yes, I am aware of that.

4 Q. Can we agree, however, that if
5 antibiotics are started in this case before the
6 blood cultures -- the blood is drawn for
7 culture, then you will not be sure what
8 organism you're dealing with?

9 A. That is a possibility, but that's
10 not what I said should have been done,
11 according to the standard, I said that three
12 sets of blood cultures should have been drawn
13 before, then the antibiotics should have been
14 given.

15 Q. So you are agreeing then that you
16 take the blood samples and then start the
17 antibiotics, not start antibiotics empirically
18 and do the blood cultures?

19 A. Correct. However, in grave
20 difference to what was done with this patient,
21 this patient should have had the blood cultures
22 done right away, as the first two sets were
23 done, had the third set done very soon after
24 and then started antibiotics, again, within two
25 hours or so of being admitted to the hospital.

Zola

1 Q. In your opinion, did she have
2 bacterial endocarditis on January 25, 1999?

3 A. Yes, I believe that the patient did
4 have early infectious subacute bacterial
5 endocarditis.

6 Q. What are you basing that on?

7 A. Based upon the circumstances of this
8 case, her history, the procedure that she had
9 on 12/15/98, the bug or organism or bacterium
10 species that was eventually cultured out and
11 presumed to be growing on her valve and the
12 findings on echocardiogram from January 28,
13 '99.

14 Q. What was the findings on the
15 echocardiogram that leads to that conclusion?

16 A. On echocardiogram on January 28,
17 '99, there is severe thickening and nodularity
18 of the mitral valve leaflets, specifically
19 severe thickening and nodular tissue in the
20 area that this patient did develop a mobile
21 vegetation, and so I believe that given her
22 circumstances and presentation, that -- and
23 knowing the natural history of subacute
24 bacterial endocarditis caused by Strep. mitis,
25 that this patient had underlying endocarditis

Zola

1 in a relatively early stage in late January of
2 1999 and it subsequently progressed after that
3 point in time.

4 Q. What clinically was available to
5 Dr. Zirafi to indicate that she might have
6 endocarditis?

7 A. Not very much, in that Dr. Zirafi
8 knew that the patient had a history of
9 rheumatic heart disease and would have known or
10 should have known that the patient had had some
11 procedures recently, but based on Dr. Zirafi's
12 medical records, which are very thorough and
13 complete, the patient didn't have much else in
14 the way of complaints at that point in time to
15 suggest that she had underlying endocarditis.

16 So although I believe she did have
17 it at that time when seeing Dr. Zirafi, she did
18 not have much in the way of complaints or
19 enough in the way of complaints to suggest that
20 she had underlying endocarditis or that she
21 required a workup or diagnostic testing for the
22 presence or absence of underlying endocarditis.

23 Q. Is it your opinion then that
24 Dr. Zirafi met the standard of care?

25 A. Yes. In terms of in her office

Zola

1 visit at that point in time.

2 Q. How about after the echocardiogram
3 came back?

4 A. Although the echocardiogram was
5 abnormal and though -- although it was required
6 based upon that that Dr. Zirafi communicate
7 those abnormalities to the patient, I believe
8 she may have deviated from standard of care
9 initially in not discussing those findings with
10 the patient and/or making sure that the patient
11 had adequate follow-up except for the fact that
12 this patient did have follow-up after that
13 point in time, and eventually Dr. Zirafi did
14 send the results of that echocardiogram to the
15 location at which Maria O'Donnell was having
16 medical follow-up.

17 Q. She sent it to Dr. Mosto, correct?

18 A. No, she sent it to Dr. Rosenfeld,
19 but at that clinic where I believe Dr. Parris
20 was also.

21 Q. She also sent it to doctor --

22 A. She may have sent it to Dr. Mosto
23 eventually, but I'm talking about she sent it
24 on the 19th of February to Dr. Rosenfeld, I
25 think the name is.

Zola

1 MR. MISHKIND: Correct.

2 Q. Doctor, let me just tie this and
3 then I'll move on because the other attorneys
4 will have to ask questions as well.

5 Did Dr. Zirafi's care in any manner
6 deviate from the standard of care?

7 MR. DZENITIS: Objection.

8 MR. MISHKIND: Do you understand her
9 question?

10 THE WITNESS: Yes, I do.

11 Q. No, I don't believe it did. I
12 believe I would have done things a little
13 differently in terms of making sure that the
14 medicine doctors following her knew about her
15 findings on the echocardiogram earlier, but I
16 don't believe that Dr. Zirafi not doing that
17 was a deviation from standard of care.

18 In other words, again, I would do it
19 somewhat differently, but that doesn't mean she
20 deviated from the standard of care, because
21 eventually this patient did get medicine
22 follow-up and she did get the results of her
23 echocardiogram to the doctors that were
24 following her.

25 Q. Turning to Dr. Hollin, did

Zola

1 Dr. Hollin deviate from the standard of care?

2 A. Yes, he did.

3 Q. In what manner?

4 A. In a number of manners, but very
5 specifically when he saw the patient on the
6 18th of February, he did not obtain an adequate
7 history or appreciate adequately the history
8 from this patient of her having had a history
9 of rheumatic heart disease.

10 Given the fact that this patient had
11 a history of rheumatic heart disease and was
12 complaining of 12 days of fever on and off, he
13 should have had a very strong suspicion for the
14 patient having underlying endocarditis, and
15 therefore, should have made sure that the
16 patient had an EKG, blood work including a CBC
17 and differential, a Westergren sedimentation
18 rate and blood cultures performed at that point
19 in time.

20 In addition, for whatever reason,
21 whether it be a broken machine or lack of
22 technician or whatever, if the blood testing
23 could not be performed that evening at his
24 office or at the MedCenter or wherever, then he
25 had an obligation to send the patient for all

Zola

1 the testing that I just described as soon as
2 possible, whether it be to an emergency room,
3 to a hospital or to some other facility, and
4 ensure that this patient did receive that kind
5 of testing as soon as possible. Had that
6 testing been done, this patient should have
7 been admitted to the hospital for an underlying
8 deep-seated infection and presumptive
9 infectious endocarditis and should have been
10 treated according to the standard of care for
11 that infection with antibiotics in a very
12 timely fashion.

13 And had all that been done, then
14 this patient would not -- would more likely
15 than not not have had her stroke and more
16 likely than not not have required valve
17 replacement when she did. Although it is
18 possible that she would have required valve
19 replacement eventually, whether it be five, ten
20 or twenty years down the line.

21 Q. What were the indications for the
22 valve replacement?

23 A. The indications would have been
24 worsening of her mitral regurgitation,
25 enlargement of the chambers of her heart and

Zola

1 increasing in symptoms consistent with that
2 valve regurgitation such as shortness of
3 breath, weakness, fatigue.

4 Q. Should she have this valve replaced
5 shortly after the initial stroke?

6 A. No.

7 Q. Why not?

8 A. Because there wasn't a specific need
9 for it at the time.

10 Q. Did she ultimately flick off
11 vegetation resulting in the optic artery being
12 impaired?

13 A. I don't know if it's a vegetation,
14 but she had an embolus or she had something --
15 most likely something from her heart valve that
16 broke off and eventually caused her to lose her
17 vision in one of her eyes.

18 Q. Should that valve have been replaced
19 earlier?

20 MR. MISHKIND: Objection.

21 Go ahead.

22 A. Again, I already answered that
23 question.

24 Q. How could that embolus have been
25 prevented?

Zola

1 MR. MISHKIND: Objection.

2 A. Yes, if her valve had been replaced
3 earlier, it might have prevented that embolic
4 event in terms of her losing her vision and it
5 also might have been fraught with other
6 complications. You don't replace a valve when
7 it doesn't need to be replaced because of what
8 may happen in the future.

9 In this particular case, it is
10 possible that replacing that valve would have
11 prevented that particular event, but it wasn't
12 indicated at the time.

13 Q. It was replaced shortly thereafter,
14 was it not, Doctor?

15 A. Correct.

16 Q. I'm saying that that valve
17 replacement was timely.

18 A. I think that replacing her valve at
19 that time was a judgment call, but it was
20 within the standard of care to replace her
21 valve at that time, especially given the fact
22 that she had had a second embolic event from
23 problems with that valve.

24 However, if the valve had not been
25 replaced at that point in time, that also would

Zola

1 have been within the standard of care.
2 Undoubtedly her valve would need to be replaced
3 at some point in time, but the longer that you
4 don't have to replace the valve, the longer you
5 put off her being exposed to the risks of dying
6 from the operation, the longer you put off her
7 having to be on Coumadin or blood thinners or
8 have the risks of bleeding to death or bleeding
9 complications from being on Coumadin.

10 So again, you don't replace a valve
11 unless it's specifically indicated, but there
12 will be times when it may or may not be
13 indicated and that's when it is within the
14 standard of care to do it either way. That's
15 when it becomes a judgment call, that is, a
16 judgment call still has to fall within the
17 standard of care whatever that judgment may be.

18 Q. The date of the diagnosis of
19 endocarditis --

20 A. Sorry, repeat the question, we
21 missed the first two words.

22 Q. Was the impression endocarditis, is
23 it not a judgment call as to the exact timing
24 of starting antibiotics?

25 MR. MISHKIND: Objection.

Zola

1 Go ahead.

2 A. I can't answer the question the way
3 you've asked it because you used the phrase
4 "exact timing." I've already answered that
5 question in the sense that I've said that it's
6 within the standard of care to treat patients
7 with infectious endocarditis or any deep-seated
8 infection, and especially an infection like
9 endocarditis, as an infection in the
10 bloodstream. It's the standard of care to
11 treat those patients with antibiotics as soon
12 as possible because their likelihood of doing
13 well is directly related to how quickly they
14 get antibiotics.

15 To delay antibiotics in a patient
16 that has an underlying deep-seated infection
17 such as infectious endocarditis would be in
18 deviation from the standard of care unless
19 there were an overwhelming reason to delay that
20 treatment.

21 Q. What would those reasons be?

22 A. None that are present in Maria
23 O'Donnell in this particular case.

24 Q. What kind of -- give me some
25 examples, however, whether or not in this case.

Zola

1 MR. MISHKIND: Objection.

2 Go ahead.

3 A. An example might be if the patient
4 had already received intravenous antibiotics
5 multiple times in the past, had already had an
6 echocardiogram showing that there was no large
7 vegetations and if it were felt that the
8 patient was at low risk for having a delay in
9 treating her with antibiotics or treating the
10 patient with antibiotics, and so in that sort
11 of circumstance, a brief delay in treating with
12 antibiotics may be warranted within the
13 standard of care but certainly not in a patient
14 that has had a history of high spiking fevers,
15 of fevers going on for a long period of time,
16 with a history of rheumatic heart disease and
17 without question not in a patient that has a
18 mobile vegetation on the mitral valve.

19 Q. Do you have any criticisms of
20 Dr. Kalucis?

21 A. Yes, I did, as I outlined in my
22 report.

23 Q. What are those criticisms?

24 MR. MISHKIND: Objection.

25 Go ahead.

Zola

1 A. Those criticisms have to do mainly
2 with the February 22, 1999 visit in which there
3 is some ambiguity in terms of the history that
4 he took from his patient in which he describes
5 the patient as having her symptoms all
6 returned, and it's unclear to me whether or not
7 the symptoms that all returned were the
8 hoarseness or whether the symptoms were also
9 cough, fever and indigestion. I think it's
10 possible to interpret the note that the patient
11 had an episode of cough, fever and indigestion
12 at some point prior to February 22, 1999 that
13 mostly resolved but that gave her a return of
14 her symptoms of hoarseness.

15 It's also possible that he wrote the
16 note meaning that her symptoms of cough, fever
17 and indigestion had returned; and therefore, I
18 believe he deviated from standard of care, if
19 indeed this patient had recurrent fevers, by
20 not either treating the patient and/or doing
21 diagnostic testing for the source of her fever
22 or ensuring that the patient had adequate and
23 immediate follow-up to do the same, that is
24 treatment and diagnostic testing for those
25 fevers.

Zola

1 So in order for him to comply with
2 the standard of care, he would either have
3 started the patient on empiric antibiotics on
4 the 22nd or ensure that by the 23rd this
5 patient was being seen by a medical physician,
6 that is internal medicine, cardiology,
7 whatever, by a medical physician to either
8 diagnostically test and/or treat those fevers.

9 Q. Are you also suggesting that his
10 deviations from the standard of care if he did
11 what you said he should have done, that the
12 consequences, embolic event would have been
13 either attenuated or avoided?

14 A. No, I believe that on February 22,
15 1999 when he saw the patient, at that point in
16 time, again, having started the patient on
17 antibiotics that day or the next day more
18 likely than not would have diminished the
19 likelihood of this patient having had a stroke.
20 However, again, on the 22nd, I cannot say more
21 likely than not that treating this patient with
22 antibiotics would have prevented the stroke.

23 Q. That's on the 22nd, I'm sorry,
24 that's the date you said?

25 A. Yes, that's the date that

Zola

1 Dr. Kalucis saw the patient.

2 Q. Why is it you can't say that,
3 Doctor?

4 A. Because I believe that this patient
5 developed her mobile vegetation some time soon
6 after, approximately the 20th or the 21st of
7 February, and therefore, essentially after the
8 21st of February, treating with antibiotics
9 would have diminished the likelihood of that
10 mobile vegetation from growing and breaking off
11 and causing a stroke, but I believe that by
12 that time, it was too late to say within a
13 reasonable degree of medical certainty or more
14 likely than not that treating with antibiotics
15 would have prevented the stroke.

16 Whereas before the 21st of February,
17 I believe I can say that treating with
18 antibiotics, that is appropriate antibiotics
19 for endocarditis, would have prevented growth
20 of her vegetation and eventual breaking off of
21 the vegetation and eventual stroke. I think I
22 said that correctly. I'll probably figure that
23 out when we actually read the transcript of
24 this deposition.

25 Q. Are you critical of Dr. Parris?

Zola

1 A. Yes.

2 Q. What manner?

3 A. How about before we get to that, we
4 take a two-minute break?

5 MR. MISHKIND: Let's take a
6 five-minute break.

7 (Short recess taken.)

8 Q. Doctor, I think where I left off,
9 you have criticisms of the care of Dr. Parris?

10 A. Yes.

11 Q. Why don't you tell us what those
12 are?

13 A. Okay. I'll try to summarize them as
14 best I can. But basically when Dr. Parris saw
15 the patient on 2/8/99, I believe that he had no
16 appreciation of her history of rheumatic fever
17 and rheumatic heart disease, that he
18 inappropriately and deviating from the standard
19 of care treated her history of hoarseness,
20 fatigue, calf cramps, fever, sinus troubles and
21 a temperature of 103.8 on 2/7 p.m. and also of
22 104.4 basically and also not having symptoms of
23 an upper respiratory illness, basically that he
24 treated those findings with doxycycline and in
25 deviation of the standard of care did not do

Zola

1 blood work including a CBC, sedimentation rate
2 and blood cultures and did not perform an EKG.

3 Essentially the same criticism or
4 criticisms or whatever apply to the 2/11/99
5 visit, and essentially the same criticisms
6 applied to any time from 2/17 on, that is, on
7 2/17, he received a phone call from the patient
8 that fevers and chills were still present, he
9 didn't get back to the patient until a day and
10 a half later at 8:30 p.m. on 2/18 leaving her a
11 message because the patient had already gone to
12 the MedCenter, that he got a telephone call
13 from the patient at 1 o'clock in the morning on
14 2/19 and was told that she had continued fevers
15 to 103 and told her to take the Biaxin and
16 didn't have her come in for diagnostic testing
17 and/or treatment the next day, whether it be to
18 the office or to the emergency room at the
19 hospital, that on a second telephone -- that on
20 the second telephone call of 2/19, he noted
21 that the patient's CBC came back with a white
22 count that was elevated at 11.4 and didn't
23 attribute enough significance to that abnormal
24 white count, again, to do what I said already,
25 that is to ensure the patient had diagnostic

Zola

1 testing with blood work and EKG as discussed
2 and eventually admit the patient to the
3 hospital.

4 He also missed the significance of a
5 rheumatic crit of 30, which is low and very
6 clearly anemic and also consistent with her
7 underlying infection. Basically that he didn't
8 see her to do these things. And I should say
9 either see her or ensure that she be seen by
10 someone either in his office or in an emergency
11 room or hospital or somewhere else to perform
12 the testing and treatment that I've already
13 discussed.

14 I think that pretty much outlines
15 the major deviations from standard of care by
16 Dr. Parris. Had he practiced medicine within
17 the standard of care and ensured that this
18 patient got the diagnostic testing of the blood
19 work and the EKG in a timely fashion from
20 February 8, 1999 on, then I believe she would
21 not have had the subsequent stroke she suffered
22 and would not have required her valve
23 replacement at the early time that she then did
24 have valve replacement.

25 Q. Doctor, have you told us the

Zola

1 criticisms of all the caretakers in this case?

2 A. I believe so, although some of it
3 may be in kind of a summary form. I haven't
4 given you a detailed line by line critique of
5 every visit and every note by every doctor,
6 that is, there may be other deviations in terms
7 of not listing aspects of a physical exam or
8 not properly documenting things in the medical
9 records or not obtaining old reports or medical
10 records when they should have been obtained,
11 all sorts of things like that, but either way,
12 I believe that the way that I've answered
13 effectively summarizes the vast majority of my
14 opinions and lays out the reasons for my
15 opinions in terms of deviations from standard
16 of care of the doctors involved in this case.

17 Q. Did you give me all of your
18 criticisms of Dr. Balanson?

19 A. I believe so. If on relooking at my
20 deposition or relooking at the records I
21 realize that something has been omitted, then I
22 will, of course, let Mr. Mishkind know as soon
23 as possible so that he may inform you.

24 Q. At the time that you wrote your
25 report on July -- January 17, sorry, 2001, not

Zola

1 seeing Dr. Balanson's deposition, correct?

2 A. Correct, I had also not seen the
3 full and complete records from Dr. Hollin nor
4 the full and complete records from Dr. Balanson
5 nor the full and complete records from
6 Mt. Sinai, but I'd clearly seen the majority of
7 things as was outlined in my report, I believe,
8 and certainly had enough of the records to form
9 my opinions. And I don't believe my opinions
10 have significantly changed since that point,
11 they've only been bolstered by other materials
12 that I've subsequently obtained.

13 With the understanding also that my
14 opinions about Dr. Hollin in my report involved
15 me discussing whether or not he actually had
16 the information or whether or not Maria
17 O'Donnell had communicated information about
18 her rheumatic heart disease to Dr. Hollin, but
19 at that time I did not have the intake
20 questionnaire that was provided to me
21 eventually in a more complete copy of his
22 medical records in which I did see that he did
23 have the information of her having had
24 rheumatic heart disease and/or heart murmur in
25 the past.

Zola

1 Q. Doctor, at the time of your report,
2 Dr. Balanson's office notes are complete office
3 notes?

4 A. I know that I didn't have complete
5 office notes because I subsequently received a
6 more complete copy of those office notes after
7 issuing my report.

8 Q. And the initial set of records that
9 you had at the time of your report did not
10 include communications about her with Dr. Mosto
11 and Dr. Cuglewski?

12 A. Correct.

13 Q. Also you did not have the complete
14 Mt. Sinai records when we have the progress
15 notes on 2/25 of Dr. Cuglewski, correct?

16 A. No, I believe I had that progress
17 note.

18 Q. You had the consult, not the
19 progress notes; is that correct, Doctor?

20 A. No, I believe I had both when I did
21 my initial report. Let me just see. Yes, I
22 had the progress note also from 2/25/99.

23 Q. Blood culture results, correct?

24 A. What about the blood culture
25 results? I had those when I did my report

Zola

1 also.

2 MS. HARRIS: Okay. I don't have any
3 further questions, Doctor. I'm going to
4 scan my notes and let someone else go
5 ahead of me first.

6 MS. MOODY: I'll go, David, if you
7 want.

8 MR. MOSS: That's fine.

9 EXAMINATION BY

10 MS. MOODY:

11 Q. Doctor, I'm Nancy Moody and
12 representing Dr. Parris and his medical group
13 in this case. I just have a few follow-up
14 questions here, I'll try not to be redundant.

15 How much vegetation does it take to
16 cause a stroke?

17 A. Very small.

18 Q. How long does it take for an amount
19 of vegetation capable of causing a stroke to
20 form?

21 A. It may only take a day or a couple
22 of days for the amount to form; however, the
23 amount has to be formed and changed in a way
24 that it's also likely to break off, so not only
25 does a vegetation have to form as a growth on

Zola

1 the valve but it has to extend out, it has to
2 have a stalk, it has to in some way become
3 mobile or change in a way that little pieces
4 start breaking off in the bloodstream.

5 Q. In this case, can you tell me to a
6 reasonable degree of medical probability when
7 the formation of the vegetation began?

8 A. Well, the formation of the
9 vegetation began when the patient developed
10 endocarditis sometime in late December and/or
11 in January, December of '98 or January of 1999.
12 By the time the echocardiogram was done on
13 1/28/99, there was undoubtedly vegetation
14 material that existed on the valve, but none of
15 it was specifically mobile or flicking around
16 or looking like it was likely to break off.

17 So sometime after the 28th of
18 January 1999 is when the vegetation would
19 have -- vegetation material on this -- on Maria
20 O'Donnell's valve would have changed in form
21 and basically taken the form that was more
22 likely to break off and embolies and cause a
23 stroke. Given the fact that we see what it
24 looked like on 2/25/99, given her clinical
25 course in terms of fevers, when she first

Zola

1 spiked a large fever, which was at least on
2 2/7/99, I believe by 2/7/99 she already had a
3 significant amount of infectious material on
4 the valve to create a very high fever.

5 However, knowing how long it takes
6 to form vegetations and their likelihood of
7 breaking off and causing strokes, I believe she
8 formed the mobile vegetation somewhere around
9 the 21st of February or possibly even a little
10 bit beforehand. That is, it may have already
11 been mobile before then, but it continued to
12 grow from that point on and become much more
13 likely to break off and cause a stroke from,
14 say, the 22nd -- or 21st to 22nd onward.

15 Q. Did you just say that on February
16 2nd of '99, she had enough vegetation on the
17 valve to cause the high fever?

18 A. No, on February 7th.

19 Q. Wait a second. Strike that.

20 MR. MISHKIND: We knew what you
21 meant.

22 Q. On February 7 of 1999, did you say
23 that she had enough vegetation on her valve at
24 that point to cause the high fever of 103?

25 A. Yes.

Zola

1 Q. Is it your opinion that the fevers
2 that she claimed to have been spiking or
3 actually had been noted were related to the
4 vegetation?

5 A. That's simplifying things too much,
6 it's not just the vegetation. She undoubtedly
7 had infection on her valve, most likely in more
8 than one isolated spot, and the vegetation
9 grows out of one of the spots, but the
10 vegetation is like a stalk of broccoli that's
11 growing out of an area that is infected, but
12 the area that is infected that the stalk of
13 broccoli grows out of is also called a
14 vegetation, it's just not the vegetation that
15 also looks like a stalk of broccoli that's
16 flying in the wind or flipping around in the
17 bloodstream.

18 Q. I just wanted to be clear on whether
19 or not you were saying that the temperature
20 issue is related to vegetations and if there
21 hadn't been vegetation, she wouldn't have had
22 the spiking temperatures?

23 A. Yes and no in the sense that any
24 endocarditis is, by definition, vegetation,
25 okay, so vegetation just means growth on the

Zola

1 valve, but that's what endocarditis is, growth
2 on the valve, it's a growth on any part of the
3 heart, but in her case, she had growth on her
4 damaged valves, so she had bacteria growing on
5 her valves that started way back in either
6 December soon after her -- the scope down her
7 nose and then to the back of her throat or some
8 time soon after that from another infection
9 that she had, but either way, as soon as the
10 valve was infected, it has vegetation on it.

11 The vegetation may just be a surface
12 infection, it may not be flipping around in the
13 bloodstream, but it's still a vegetation.

14 Q. And this vegetation, do you believe
15 the vegetation that was forming was not visible
16 on the echocardiogram that Dr. Zirafi did?

17 A. Well, no, on the echocardiogram that
18 Dr. Zirafi did shows clear abnormalities that
19 are nodules and thickened areas of the valve
20 that could have been vegetations. But there's
21 no way to know what they are at that point in
22 time. They were just looking at the echo with
23 her history at that point in time, there would
24 be no way of knowing what they were.

25 In retrospect, I believe that there

Zola

1 were areas of infection on her valve especially
2 given where her mobile vegetation eventually
3 arises from. But again, at that point in time,
4 to be fair to Dr. Zirafi, there would be no way
5 for her to know what those thickenings were
6 with the exception of saying that they're
7 thickenings and they could have been there for
8 20 years from her rheumatic fever.

9 Q. Would your opinion be different if
10 Dr. Zirafi knew of the history of fever and
11 fatigue?

12 A. Absolutely.

13 MR. DZENITIS: Objection.

14 A. In other words, that's very clearly
15 not present in her very detailed and
16 comprehensive note. But in the --

17 MR. MISHKIND: She's saying
18 hypothetically.

19 A. In the hypothetical that she knew
20 that this patient was having fevers and
21 fatigue, and the fatigue is almost meaningless,
22 it's the fevers, but in the presence of this
23 patient having fevers and having that
24 echocardiogram, then the standard of care would
25 have required her to have performed blood

Zola

1 testing, blood cultures, et cetera.

2 Q. Does every patient with rheumatic
3 heart disease develop heart valve damage?

4 A. Not necessarily, but, yes, in that
5 you've already described it as rheumatic heart
6 disease, but sometimes rheumatic heart disease
7 may be just some damage of the tissue, not of
8 the valve specifically, so there's always the
9 exception, but within a reasonable degree of
10 certainty, anyone with rheumatic heart disease
11 has damage to their valves or to a valve
12 somewhere. Now, anyone with rheumatic fever
13 may or may not develop damage to their valves.

14 Q. But it's your opinion that she
15 developed damage to her valves as a result of
16 rheumatic fever based upon the echocardiogram
17 of January of 1999?

18 A. Yes.

19 Q. Even in retrospect?

20 A. Oh, absolutely.

21 Q. What caused the fever in this case
22 to wax and wane?

23 A. That's the natural cause of subacute
24 bacterial endocarditis with a organism like
25 Strep. mitis in addition to the fact that she's

Zola

1 being treated with antibiotics at various
2 times.

3 Q. You're aware, are you not, that
4 there has been some testimony that Maria took
5 antibiotics on her own that were not ordered by
6 a physician at various times?

7 A. I believe so, yes, and therefore,
8 those antibiotics may have also altered the
9 course of her underlying endocarditis, not
10 curing it, but making it wax and wane.

11 Q. Do you think that she caused her
12 condition to be worse?

13 MR. MISHKIND: Objection.

14 A. Not specifically, no, she didn't
15 cause her condition to be worse. If the
16 infection was there, the infection was there.
17 She may have partially treated it at times
18 because she did or didn't take -- let's say she
19 had taken other antibiotics at various times,
20 it would have been partial treatment and so it
21 would have made her -- her clinical course be
22 something of intermittent fevers, but it --
23 that didn't specifically make her worse, if
24 anything, it made her a little bit better, not
25 curing her but, again, partially treating the

Zola

1 underlying infection.

2 Q. So in other words, you don't place
3 much significance on the fact that she was
4 taking antibiotics without a doctor's order?

5 MR. MISHKIND: Objection.

6 Go ahead.

7 A. Your question doesn't make sense.
8 There is a significance to her taking
9 antibiotics without a doctor's order is what
10 may be contributing to the waxing and waning
11 course of her fevers, of her infection, of her
12 symptoms.

13 Q. Making it more difficult to
14 diagnose?

15 MR. MISHKIND: Objection.

16 A. It may or may not make it more
17 difficult to diagnose. It is not hard to
18 diagnose someone with rheumatic heart disease
19 who has endocarditis when they present with a
20 fever of 103.8 and then 104.4, all you need to
21 do is draw blood cultures, that takes all of
22 five minutes.

23 Q. Did you see any place in the records
24 that you reviewed where a health care
25 practitioner actually took a temperature that

Zola

1 high on Maria O'Donnell?

2 MR. MISHKIND: What high?

3 Q. 103, 101.

4 A. I recall a temperature of 100 point
5 something by either Dr. Hollin or Dr. Parris.

6 Q. Is it your recollection that the
7 temperatures of 103 and 104 were reported by
8 Maria as opposed to being temperatures that
9 were actually taken by a health care
10 practitioner?

11 A. Correct. In other words, at
12 MedCenter by Dr. Hollin we have a temperature
13 of 100.0, Dr. Parris has a temperature that was
14 taken of 37.1.

15 Q. Which would be what?

16 A. Which I'd have to look at the
17 conversion scale, but somewhere in the near
18 normal range, and he just lists that the
19 patient ran a temperature of 103.8 at night.
20 In fact, her fever pattern was such that most
21 of her fevers did seem to occur at night.

22 Q. Are there other illnesses where that
23 is the case, that fevers tend to occur at
24 night?

25 A. I'm -- almost anything that causes

Zola

1 fevers can have fevers that occur at night.

2 Q. But there aren't any particular
3 diseases that you can think of that?

4 A. There may be, but it's not a
5 diagnostic point. In other words, it's not
6 going to make the diagnosis one way. Anything
7 that is a bacterial illness can have fevers
8 that tend to spike in the afternoon or evening,
9 whatever, once a day.

10 Q. What, if anything, did the
11 hoarseness play in this whole scenario, did it
12 have anything to do with the bacterial
13 endocarditis?

14 A. Well, only in that her hoarseness
15 may have been a residual of an illness that she
16 had that helped seed her valve with the
17 bacteria. In other words, she might have had a
18 viral illness that caused her hoarseness, she
19 may have had laryngitis, a tracheal bronchitis
20 that was viral, but if it also had a bacterial
21 component to it and seeded her valve during
22 that time, then that's what helped cause her
23 infection, or her hoarseness is what got her to
24 the ear, nose and throat doctor, Dr. Kalucis,
25 that caused him to do the scope that he did

Zola

1 which may have seeded her valve with bacteria
2 on 12/15/98, so that's how it played a role,
3 but as a specific symptom, it's not diagnostic
4 of anything except hoarseness.

5 Q. You have already answered this in
6 discussing antibiotics and IV antibiotics and
7 then needing to generally carry on with those
8 four weeks. During that four-week time period,
9 during the first week, is it -- is the
10 vegetation continuing to grow or will giving
11 antibiotic therapy stop the vegetation from
12 growing as soon as the antibiotic therapy is
13 given?

14 A. It would be different for a given
15 individual patient, but as a general rule, once
16 appropriate antibiotics are started, there
17 should be no further growth of bacteria, and
18 the inflammatory process should begin to
19 subside because the bacteria are being killed
20 and cleared.

21 Q. Is there any mechanical way to
22 remove this flapping vegetation from the heart?

23 A. Yes.

24 Q. How would you do that?

25 A. Surgery.

Zola

1 Q. Was that indicated in this case?

2 MR. MISHKIND: At what point in
3 time?

4 A. Indicated doesn't make sense in that
5 it was indicated at lots of different times.
6 Yes, it could have been performed any time
7 after the 25th of February once that vegetation
8 was seen. And once that mobile vegetation was
9 seen on the 25th, the consideration for surgery
10 was there, that is it could have been
11 considered; however, it's infrequent that
12 patients will be operated on for a single
13 mobile vegetation alone without having already
14 been started on antibiotics.

15 In other words, it would be within
16 the standard of care to have operated on her
17 and removed that vegetation because of the
18 risks of stroke, but it would have also been
19 within the standard of care to have done what I
20 already described, which is to start the
21 patient on antibiotics empirically within a
22 couple of hours after admission and after
23 having drawn her blood cultures and then
24 followed her clinically with repeat echos to
25 see what the vegetation was doing, and if the

Zola

1 vegetation was either growing or becoming more
2 mobile, again, a decision could have been made
3 at any point to either do surgery or not do
4 surgery depending upon the findings of
5 echocardiogram and/or her clinical course, that
6 is, other things, like if she continued to
7 spike fevers, if it looked like they couldn't
8 clear the infection with antibiotics alone,
9 that would also be an indication for doing an
10 operation.

11 Q. Would the appearance of the flap, as
12 we've been calling it --

13 A. The vegetation that was flapping in
14 the bloodstream.

15 Q. Would the size of that or the
16 appearance of the movement of the flap increase
17 if that were -- if the movement was increasing
18 or there was a fair amount of movement, would
19 that increase the desire to treat it
20 mechanically as opposed to medically?

21 MR. MISHKIND: Objection.

22 Go ahead.

23 A. Absolutely. And, in fact, she had a
24 very mobile vegetation on the 25th. However,
25 it's usually a size of 1 centimeter or so, that

Zola

1 is kind of the breakpoint at which point you
2 start to consider doing surgery or not doing
3 surgery, so hers was kind of a borderline case
4 for considering doing surgery even on the 25th,
5 but that's why I said, at that point in time on
6 the 25th, it would have been within the
7 standard of care to either do surgery and treat
8 it with antibiotics right away or to just treat
9 her with antibiotics right away.

10 Q. When you say that Dr. Zirafi did not
11 have information regarding fever and fatigue,
12 are you discounting what Dr. Balanson's records
13 and Dr. Parris's records, indicating that at
14 least she did have that information?

15 MR. DZENITIS: Objection.

16 Q. Let me refer you to Dr. Balanson's
17 discharge summary on, I guess, Page 1. Under
18 the past medical history, Dr. Balanson says,
19 significant for rheumatic fever as a child, she
20 does use antibiotic prophylaxis before dental
21 procedures. She has not had dental work
22 recently but relates visit to ENT in December
23 1998 for hoarseness.

24 A. Before you go any further, let me
25 see.

Zola

1 Q. The discharge summary, it's dated
2 2/14/99 through 3/11/99.

3 A. I need to see the top part.
4 Yes, okay.

5 Q. In the paragraph beginning, past
6 medical history, second paragraph.

7 A. Yes.

8 Q. I've read part of it to you, about
9 four lines down, fever began about one month
10 after the ENT visit, so the ENT visit we know
11 was mid December, so based upon at least this
12 dictation, the fever would have begun by mid
13 January?

14 MR. DZENITIS: Objection.

15 A. Again, says about one month, that's
16 not extremely precise as to when she had a
17 fever, not only that but it's a retrospective
18 past medical history given by Dr. Balanson in
19 the hospital and dictated sometime on or around
20 3/11/99. I would just refer you back to
21 Dr. Zirafi's note in which she clearly
22 documents a detailed, you know, medical history
23 and physical exam at which point she says the
24 patient or she, Maria O'Donnell, denies any
25 fevers or chills.

Zola

1 Q. Then in Dr. Parris's office visit of
2 2/8/99, he -- in the second paragraph of that
3 dictation he says, about -- I'll start the
4 third line down, he started her on Prevacid for
5 possible laryngitis, her voice came back, but
6 she seemed to have fever and fatigue. She saw
7 Dr. Zirafi as an internist for fever and
8 fatigue.

9 MR. MISHKIND: Now, your question
10 is -- before he answered, I want to make
11 sure I understand your question.

12 Q. I'm asking if you took those -- that
13 information into account when you made the
14 decision -- the determination that Dr. Zirafi
15 did not have that information?

16 MR. DZENITIS: Object to the form.

17 A. Yes, I did, in that, again, this is
18 Dr. Parris writing things based upon his
19 impression and talking to the patient Maria
20 O'Donnell about what was supposedly happening
21 when the patient saw Dr. Zirafi, whereas we
22 have a very detailed and complete documentation
23 by Dr. Zirafi about what actually did happen
24 when she saw the patient.

25 Q. That is certainly important to take

Zola

1 into account what the patient tells you about
2 what has been happening, correct?

3 A. Yes, absolutely.

4 Q. Do you know Dr. Zirafi?

5 A. Not at all.

6 Q. Do you know any of the other
7 Defendants in this case?

8 A. I don't believe so. Remember, I've
9 already answered -- well, okay.

10 MR. MISHKIND: Wait for the next
11 question.

12 Q. I believe you've answered this
13 question, Doctor, but would Maria O'Donnell
14 likely have needed a valve replacement at some
15 point even if she had not developed bacterial
16 endocarditis?

17 MR. MISHKIND: Objection.

18 Go ahead.

19 A. I can't answer that because the only
20 study that I've seen on her was from -- the
21 first echo is from 1/28/99 at which point she
22 already had endocarditis and already had
23 moderately severe mitral regurgitation,
24 although her left atrium was only very mildly
25 enlarged implying that the mitral regurgitation

Zola

1 had either been there for a short period of
2 time, and actually I should have -- that should
3 have been part of my answer when you asked me
4 why did I think she had endocarditis when she
5 saw Dr. Zirafi.

6 Part of the reason is also, I said
7 the clinical course and didn't necessarily list
8 every detail, but that's actually an important
9 detail that at that point in time, she had
10 moderately severe mitral regurgitation on her
11 echocardiogram, but her left atrium was not
12 particularly enlarged implying that the
13 moderately severe mitral regurgitation had only
14 been there for a short period of time. And
15 since there's no other specific process that
16 occurred with Maria O'Donnell to make her
17 suddenly have worsening mitral regurgitation,
18 her worsening mitral regurgitation must have
19 been secondary to endocarditis causing damage
20 to her valve and causing more leak.

21 So that's another reason why we know
22 that she had underlying endocarditis at that
23 point in time on 1/28/99, understanding that's
24 all retrospective, looking at the size of the
25 left atrium and what subsequently happened to

Zola

1 her left atrium. However, that is the first
2 echocardiogram that I have on this patient, and
3 so I can't tell you how much mitral
4 regurgitation she had before that except that
5 it must have been less than before that, she
6 had to have at least a reasonable sized left
7 atrium, if not normal, and therefore, that
8 there is no way to say that she necessarily
9 would have required ever having to have that
10 valve replaced. We just don't know what the
11 state of her valve was before that point in
12 time.

13 Q. Would you agree that of the
14 practitioners that treated Maria between
15 January of 1999 and her admission to the
16 hospital on February 24, that Dr. Zirafi had
17 the most specialized training for diagnosing
18 and treating bacterial endocarditis?

19 MR. MISHKIND: Objection.

20 Go ahead.

21 A. I can't answer the question the way
22 you've asked it, it's a yes and no answer,
23 because obviously she has more training in
24 cardiology and she would have seen more
25 cardiology cases, but the diagnosis is an

Zola

1 internal medicine type of problem that any
2 internal medicine doctor or any internal
3 medicine type of doctor should be able to
4 diagnose.

5 Q. Is there any specialty of physician
6 that you believe would not have a duty to be
7 able to diagnose bacterial endocarditis?

8 MR. MISHKIND: Objection.

9 Go ahead.

10 A. Well, yes and no. Again, any
11 physician should be able to recognize that
12 someone has a potentially serious infection and
13 make sure that they get appropriate help, but,
14 for instance, Dr. Kalucis, who is an ear, nose
15 and throat physician, would not really be adept
16 at or typically making -- doing the diagnostic
17 workup for endocarditis. It's easy enough for
18 him to have blood cultures drawn on the
19 patient, has an infection, if she has a fever
20 that's ongoing and make sure that patient gets
21 to proper medical care, but proper medical care
22 would be an internal medicine or primary care
23 type of physician ensuring that the patient had
24 blood cultures, and blood cultures are easy to
25 do.

Zola.

1 Q. Certainly Dr. Kalucis could have
2 ordered those, correct?

3 A. He could have, but that wouldn't
4 have been his job to do so, in that his job
5 would have been more to make sure that the
6 patient was seen by an internal medicine type
7 of doctor to ensure that the proper tests would
8 have been done and proper follow-up was
9 arranged.

10 Q. Doctor, in your letter -- your
11 opinion letter, you indicated that at the time
12 Dr. Parris saw the patient, that he knew of a
13 history of mitral regurgitation and
14 post-rheumatic fever, correct? You want to
15 look at your --

16 A. I want to look at both records.

17 Q. It's on Page 2 of your report.

18 A. What are you referring to
19 specifically?

20 Q. The third paragraph on Page 2.

21 A. You mean the first sentence?

22 Q. Yes.

23 A. At which time the important findings
24 included her history of mitral regurgitation,
25 post-rheumatic fever.

Zola

1 Q. That's one thing that you noted that
2 Dr. Parris had information about?

3 A. Yes. Do you want to know why I came
4 to that conclusion?

5 Q. Sure.

6 A. Because we have in Dr. Parris's
7 note, the typewritten note from 2/8/99 where it
8 says very specifically, the patient's past
9 medical, allergic and surgical history is
10 reviewed and notations made on the problem
11 list. We then have the forms that were filled
12 out by Maria O'Donnell, which are dated 2/9/99,
13 but I believe that that is a mistake since
14 these forms were reviewed by Dr. Parris on
15 2/8/99, and on those forms it very clearly
16 states that the patient listed herself as
17 having rheumatic fever and heart murmur in 1958
18 and rheumatic fever and also under illness or
19 surgery, 1958, rheumatic fever at Rainbows
20 Hospital.

21 Q. So you're basing your opinion on
22 Dr. Parris having reviewed the -- what did you
23 call this document?

24 A. It's a medical history sheet, but
25 it's also -- it's noted in here as todays

Zola

1 written questionnaire in Dr. Parris's note.

2 Q. You also note in your opinion letter
3 or mention her positive skin test for
4 tuberculosis. What significance, if any, does
5 that have to this case?

6 A. Only in that anyone complaining of
7 persistent fevers and, again, lack of other
8 types of symptoms or findings to point to a
9 specific type of infection, you'd have to worry
10 that the patient might also have disseminated
11 tuberculosis, actually, I shouldn't say
12 disseminated tuberculosis, an infection with
13 tuberculosis, whether it be disseminated or in
14 an individual area.

15 Q. And he notes -- you note that she
16 had complaints of fever, fatigue, chills and a
17 heart murmur dating back to 1958?

18 A. Are you reading from my note now?

19 Q. Yes, and all of the findings that --
20 all of the history and findings that were
21 available to Dr. Parris were also available to
22 Drs. Balanson, Kalucis and Hollin, would that
23 be fair?

24 A. I believe so, yes. I mean, in one
25 form or another -- well, no, that's not

Zola

1 necessarily true. They weren't necessarily all
2 available to Dr. Kalucis, he wouldn't have had
3 the same intake forms.

4 Q. He could have asked the same
5 questions?

6 A. Yes, he could have.

7 Q. If one doctor has a duty to take an
8 accurate history, then all the doctors have a
9 duty to take an accurate history, wouldn't that
10 be fair?

11 A. Yes.

12 Q. Doctor, can you tell me, you talked
13 a little bit about your practice, you say
14 you're in a solo practice. How many patients
15 do you see a week?

16 A. Let's say an average of 15 a day
17 times 5 days would be 75, plus whomever else I
18 might see, hospital or shots or something like
19 that, so I don't know, anywhere from 75 to 100
20 patients a day -- I mean a week, except if I
21 take a day off to testify or do something like
22 that, that will, of course, cut back on the
23 number of patients that I saw that week.

24 Q. But an average week when you're in
25 the office for the whole week or working the

Zola

1 whole week, you see a total of about 75
2 patients?

3 A. That's probably a reasonable
4 estimation.

5 Q. Do you take a day off during the
6 week?

7 A. No, not usually.

8 Q. Now, I think you testified about
9 this before, you spend really very little time
10 in the hospital; is that --

11 A. Compared to the amount of time I
12 spend in the office, yes.

13 Q. The report that you wrote, and I'm
14 sorry if I asked these questions over again
15 because I'm kind of forgetting some of the
16 things that Bev asked you, did you change the
17 report in any way at any time?

18 A. This is my final report. I mean,
19 there were undoubtedly drafts that existed that
20 I might have had to word things differently or
21 put commas in or, you know, punctuation or
22 whatever, but I mean, I didn't write this
23 perfectly right from my head as if I was Mozart
24 composing music.

25 Q. Did you ever provide a draft report

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1 to Mr. Mishkind and then ultimately dictate
2 another report or change the report that had
3 been submitted?

4 A. It's possible I may have done it,
5 but I don't recall having done that
6 specifically. I mean, I usually do at least a
7 first draft if not five drafts while I'm
8 writing the report thinking about it some more
9 and getting it down on paper and changing it
10 and everything else, so it's possible that at
11 any point in time while I was working on it, I
12 might have sent him something just to see what
13 I was formulating for opinions, but I just
14 don't have a specific recollection of that
15 right now.

16 Q. Were you ever asked to make changes
17 in the report?

18 A. Not that I recall. I mean, I don't
19 usually get asked to make changes, nor would I
20 necessarily make changes in a report. If it's
21 my opinions, those are going to be my opinions
22 based upon my review of the material.

23 I might make additions to it if I
24 receive further information that I think
25 changes the opinions in some way, and when I

Zola

1 received the further records that I did
2 receive, it changed things subtly in that I now
3 had clear-cut evidence, for instance, that
4 Dr. Hollin did have this intake form that Maria
5 O'Donnell listed her heart disease, rheumatic
6 fever type stuff on it. But that still didn't
7 change the opinion that Dr. Hollin had an
8 obligation to either review that form or ask
9 the questions himself and get that information
10 when deciding on how to treat Mrs. O'Donnell,
11 or Miss O'Donnell, I'm not sure which one it
12 is.

13 MR. MISHKIND: Mrs.

14 Q. Did you discuss this case with any
15 other physicians?

16 A. No.

17 Q. I notice in your CV that you've
18 practiced at a number of various facilities
19 since you started practicing medicine,
20 sometimes for a couple of years, sometimes for
21 more. Were your changes from one facility to
22 another always related to business or monetary
23 factors?

24 A. Well, no, they may have been related
25 to a different job. I mean, I was full-time

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1 faculty for, whatever, seven years at New York
2 Hospital. I then took a position as the vice
3 chairman of medicine and chief of cardiology at
4 Brookdale Hospital. I then came back in
5 private practice in Manhattan, and I then
6 changed affiliations with various hospitals,
7 various doctors, changing office practices and
8 the different physicians that I'd been working
9 with depending on how different business
10 situations arose or opportunities arose.

11 Q. Were you ever a full professor in
12 medicine?

13 A. No, I was only in a full-time
14 academician for approximately ten years, so the
15 usual sequence of events would be assistant
16 professor for approximately seven years,
17 associate professor for seven years, full
18 professor after that.

19 Q. You've discussed the fees that you
20 charged for reviewing cases. In 19 -- no,
21 let's say in 2002, how much did you earn doing
22 medical legal reviewing and testifying?

23 MR. MISHKIND: Objection.

24 If you know, go ahead.

25 A. I don't know. I haven't done my

Zola

1 taxes for 2002 yet, so I couldn't give you a
2 total. I'll estimate it at somewhere --
3 estimate it as somewhere in the neighborhood of
4 \$150,000.

5 Q. I assume that you've never had your
6 license to practice revoked, suspended,
7 modified in any way?

8 A. Well, whether you assume or you
9 don't, I haven't.

10 MR. MISHKIND: It was an accurate
11 assumption on your part.

12 Q. You're board certified in what
13 specialties?

14 A. In internal medicine and cardiology,
15 as listed in my curriculum vitae. In terms of
16 when I took the boards, having passed them the
17 first that I took them and having taken them
18 the first time that they were available to me.

19 Q. In, I think, the initial CV that I
20 had, it mentioned that you were a fellow of the
21 chest surgery?

22 A. American College of Chest
23 Physicians.

24 Q. What does that mean?

25 A. That means there's an American

Zola

1 College of Chest Physicians made up of chest
2 surgeons, pulmonologists, internal medicine
3 doctors, and to become a fellow, you had to
4 have contributed to the field in terms of
5 teaching, research, practice, in some way been
6 deemed outstanding enough to qualify as a
7 fellow in the society. And so I -- whatever I
8 earned the title fellow, you know, through my
9 publications, teaching, that sort of thing,
10 same thing as a fellow in the American College
11 of Cardiology.

12 Q. You mentioned that you had done a
13 number of, I think you called them, exchange
14 electives?

15 A. When I was a medical student, yes.

16 Q. What is the purpose of doing
17 exchange electives?

18 A. So that you get to live in a
19 different city, meet new people, see different
20 types of medicine practiced in different parts
21 of the country in different subspecialties; for
22 instance, when you practice infectious diseases
23 in southern Los Angeles, you -- some of the
24 things that I saw that I wouldn't have seen
25 otherwise were probably things like leprosy or

Zola

1 parasitic diseases or valve infections in
2 patients that had endocarditis from that part
3 of the country, which might involve different
4 organisms than the valve infections that I had
5 seen in Baltimore at Hopkins or the valve
6 infections I might have seen up in Boston at
7 Harvard medical school and its hospitals, those
8 sort of things.

9 Q. Is this something that is typically
10 done by physicians in training?

11 A. I can't tell you typical or not, a
12 lot of people do it. I don't know if typical
13 means more than 50 percent or not, so I don't
14 want to give you a legal definition that way,
15 but lots of people do it because the medical
16 schools, to some degree, encourage it. It
17 would be the same thing as being an exchange
18 student in college where you took courses at
19 another university.

20 Q. I think perhaps you were asked this
21 question. What percentage of your income is
22 derived from medical legal work?

23 MR. MISHKIND: Objection, but go
24 ahead.

25 A. I'd guess approximately 10 percent.

Zola

1 Q. Have you ever practiced with a
2 group?

3 A. Well, yes, when I was full-time
4 faculty at either Cornell or full-time employee
5 at the hospital, I was a member of groups of
6 physicians at that time, but otherwise since
7 1997, I've been in solo practice. I've been in
8 offices with other physicians, but we all have
9 separate practices, we just share facilities or
10 rent or space or whatever.

11 Q. Have you ever treated a patient with
12 bacterial endocarditis?

13 A. I'd say probably hundreds of times.

14 Q. When was the last time you treated a
15 patient with bacterial endocarditis?

16 A. Within the last year.

17 Q. How many have you treated within the
18 last year?

19 A. Only one or two that I can think of.
20 In other words, there may have been other
21 patients that I treated that had bacteria in
22 their bloodstream and that we were worried
23 about it being endocarditis and ended up
24 treating it as if it were endocarditis, but I
25 can't say for certain that it was endocarditis.

Zola

1 Q. You listed a number of companies or
2 affiliations related to perhaps having your CV
3 and forwarding cases to you for review, but do
4 you do any type of advertising yourself as far
5 as medical legal expertise?

6 A. No. I don't even know how some of
7 those companies contacted me. I believe some
8 of them found me in the Jury Verdict Reporter
9 because I was listed as having been listed as
10 an expert witness, I can't even tell you. The
11 only time that I ever actually even submitted
12 anything to anyone was at the request of a
13 lawyer from a defense firm in Manhattan who
14 asked me to send him a CV or curriculum vitae
15 and outlining, you know, what I've done for
16 medical malpractice, and so I wrote him a
17 little cover letter and sent my curriculum
18 vitae to that law firm.

19 Q. Have you ever been sued for
20 malpractice yourself?

21 MR. MISHKIND: Objection.

22 A. Yes.

23 Q. How many times?

24 MR. MISHKIND: Objection. Let me
25 show a continuing line of objection, but

Zola

1 you can continue to answer the question.

2 A. I believed I was a named defendant
3 three times, although it might have been twice
4 with me as a nonparty witness once. All of
5 this is written down somewhere, it
6 automatically gets submitted for all
7 credentialing and things like that.

8 One or two of the cases were, I
9 think, dismissed without or with prejudice or
10 something like that. One of them involved a
11 patient that had a cardiac arrest in the
12 electrophysiology lab that ended up in my CCU
13 when I was the full-time associate director of
14 that CCU. In fact, these all date back when I
15 was full-time faculty at New York Hospital, so
16 they all date back to before 1995, I believe.

17 Another one, I don't even remember
18 the circumstances of that case, another one was
19 for a patient that had a rare reaction to
20 Heparin or a blood thinning drip, he was in the
21 intensive care unit, who ended up losing a
22 piece of his hand.

23 Q. You treat only adults?

24 A. No, I have seen whatever you would
25 call human beings under the age of 18, whether

Zola

1 you call them children or not, usually they
2 tend to be big children.

3 MR. MISHKIND: Depends upon which
4 parent you're speaking to.

5 A. So overwhelmingly, more than
6 99 percent of my patients are over the age of
7 18.

8 MS. MOODY: I don't think I have
9 anything further.

10 MR. MISHKIND: David, you want to go
11 next?

12 MR. MOSS: Let me go.

13 EXAMINATION BY

14 MR. MOSS:

15 Q. I don't have too much, Doctor, I'm
16 going to be skipping around a little bit, so
17 bear with me, please.

18 I want to just go -- and I represent
19 Dr. Hollin. As I took down your opinions with
20 respect to Dr. Hollin, you indicated that he
21 deviated from the standard of care on
22 February 18th of 1999 in failing to obtain an
23 adequate history to appreciate the patient's
24 history of rheumatic heart disease, and in
25 light of her history of rheumatic heart disease

Zola

1 with a history of 12 days of fever, Dr. Hollin
2 should have had a strong suspicion for
3 endocarditis and therefore should have ordered
4 an EKG, blood work including a CBC and
5 differential and a sedimentation rate and blood
6 cultures.

7 Is that essentially the sum total of
8 your criticisms of Dr. Hollin in this case?
9 I'm going to have some follow-up questions, but
10 I want to make sure I took everything down.

11 A. No, it's not. My general total is
12 whatever I testified to already, so you've
13 paraphrased it and I believe you've left some
14 things out, but some of the things you left out
15 also include making sure that the patient had
16 adequate follow-up or having then admitted the
17 patient to the hospital or send the patient to
18 the hospital or, you know, all the other things
19 that I talked about beforehand.

20 Q. All right. Some of these criticisms
21 you're offering for the first time today with
22 respect to Dr. Hollin, in other words, they
23 were not included in your report; is that fair?

24 MR. MISHKIND: Objection.

25 A. I don't think that's true, but let

Zola

1 me just see. It's quite possible that some of
2 my criticisms are more specific today.

3 Q. There's no mention in your report
4 that Dr. Hollin deviated from the standard of
5 care in failing to order an EKG, is there?

6 A. That's true, but -- at the same time
7 that's true, but it's true because in my report
8 I didn't include it, because although I think
9 it's a deviation from standard of care that he
10 didn't order an EKG, I do not think the
11 findings of the EKG at the time would have been
12 important in the care of this patient at that
13 point in time.

14 Q. Okay. So you would agree then that
15 that failure did not cause or contribute to any
16 harm to this patient?

17 A. Correct.

18 Q. All right. Maybe this will
19 streamline everything if that's the basis upon
20 which you left some of these things out of your
21 report.

22 With respect to the blood work, your
23 report does not mention anywhere that
24 Dr. Hollin deviated from the standard of care
25 in failing to order a WESD, a sed rate,

Zola

1 correct?

2 A. Correct.

3 Q. Is that because you don't believe
4 that would have made any difference in the
5 ultimate outcome?

6 A. No, it's because he did get a CBC
7 and I'd actually thought that he had ordered a
8 sedimentation rate at the time, because when I
9 went through the records, I mixed up the test
10 that was done in the hospital with what I
11 thought he had ordered, so I thought it
12 actually had been done. But upon relooking
13 through the records, it should have been done
14 at that time, and it would have been markedly
15 elevated, but it still would have played a
16 backseat role to have -- obtaining blood
17 cultures.

18 Q. All right. I just want to -- need
19 to know whether or not you believe that
20 Dr. Hollin's failure to get a sed rate was a
21 proximate cause of any harm to this patient.

22 MR. MISHKIND: Objection. Are you
23 talking about in isolation or in
24 conjunction?

25 MR. MOSS: He just explained,

Zola

1 Howard, the basis upon which he's saying
2 that that's a criticism. I want to know
3 whether he has an opinion that that
4 criticism or that failure to get the sed
5 rate caused any harm to this patient.

6 MR. MISHKIND: Okay. I'm going to
7 object to the form of the question, but go
8 ahead.

9 A. Yes, I believe it did.

10 Q. Okay. Tell me what that was.

11 A. Well, I believe that if he had done
12 a sedimentation rate, it would have been
13 markedly elevated, and that would have been
14 another piece of information along with this
15 patient's CBC test results and blood culture
16 results which would have caused either him or
17 someone that he sent the patient to very
18 shortly thereafter to have hospitalized this
19 patient and gotten her proper treatment for her
20 endocarditis.

21 Q. Now, you also indicated in your
22 deposition earlier that you mention that he
23 deviated from the standard of care in failing
24 to get blood work including CBC and
25 differential. Dr. Hollin did, in fact, order a

Zola

1 CBC and differential on this patient, did he
2 not?

3 A. Well, he didn't get it that night.
4 I believe he got it the next morning.

5 Q. All right. And are you critical of
6 the fact that he was unable or did not get it
7 that night?

8 A. Yes, I am, although I don't believe
9 that him not getting it that night was an
10 overwhelming cause of this patient's stroke, or
11 I should say, was a significant contributing
12 factor to this patient's stroke, but it's hard
13 to say that, only in that I can't isolate these
14 things out individually in a sense this patient
15 had physicians deviating from the standard of
16 care back to February 8, and everything that
17 happened after that point contributed to her
18 eventually having a stroke from an infection
19 that was not properly treated within the
20 standard of care.

21 Q. Appreciate that, Doctor, but you
22 understand that the legal standard for medical
23 malpractice includes deviation from standard of
24 care but approximate cause, you understand
25 that, correct?

Zola

1 A. Yes.

2 Q. That's why I'm asking these
3 questions, these specific questions, and I
4 need -- I really need to know what your opinion
5 is with respect to each of these criticisms.

6 A. Okay. Then him --

7 Q. I'm asking --

8 A. So let me answer your question as
9 best as I can in saying that him not obtaining
10 a CBC that night contributed to this patient's
11 stroke.

12 Q. In what way, Doctor?

13 A. In that it delayed her diagnosis
14 that much more further or at least the
15 potential to diagnose her that much more
16 further.

17 Q. How long did it delay her diagnosis
18 or potential for diagnosis?

19 A. It put off her blood testing for
20 another eight to twelve hours.

21 Q. It's your opinion that that eight to
22 twelve-hour delay resulted in additional harm
23 to this patient; is that your testimony?

24 A. Yes, in the sense that all the
25 delays from February 8, 1999 on contributed to

Zola

1 this patient's stroke, that is all the delays
2 in treating this patient with antibiotics.

3 Q. Is there a particular reason,
4 Doctor, why you did not include the opinion
5 about the failure to do an EKG and a failure to
6 obtain sedimentation rate, CBC and
7 differentiation that night in your report?

8 A. No. I just focused on what I
9 thought was the most important thing at that
10 point in time.

11 Q. Do you understand that the purpose
12 of your report is to outline your opinions so
13 that we know what your opinions are and can
14 defend our respective clients, correct?

15 MR. MISHKIND: Objection.

16 Go ahead.

17 A. If you tell me so, yes.

18 Q. Well, isn't that -- in your work in
19 this field, isn't that typically the purpose of
20 a report, so that the other side knows what
21 your opinions are going to be at trial?

22 A. Yes, or at least knows what my
23 opinions are likely to be at the time of
24 deposition. In other words, I also knew that I
25 was going to be deposed, and therefore, I would

Zola

1 have a chance to expand upon my opinions as
2 listed in the report, and so I didn't feel that
3 I needed to detail and list every single thing
4 that I could think of going down every single
5 line of the medical records, but rather to try
6 to give both a broad overview of my opinions
7 and what I thought were at least some of the
8 more important details.

9 Q. How many pages of medical records
10 are there from Dr. Hollin in this case, Doctor?

11 MR. MISHKIND: Do you want him to
12 count the records?

13 Q. Essentially one page, is there not?

14 A. I've got about nine pages here which
15 include the MedCenter front sheet, a chest
16 X-ray report, a CBC report, a MedCenter, I
17 don't know what this is, a registration sheet
18 of some sort.

19 Q. I'll take your word for it, there's
20 nine pages of records?

21 A. See, that's not one.

22 Q. There's only one page that has
23 Dr. Hollin's writing on it, is there not?

24 A. I don't know because my discharge
25 sheet for the patient has writing on it that, I

Zola

1 think, is probably not Dr. Hollin's writing
2 because it is actually legible and readable,
3 but I'm not sure whose it is. It doesn't look
4 like his writing, but I also have a
5 prescription from Dr. Hollin with his writing
6 on it, that's in my records.

7 Q. Okay. Is it your opinion, Doctor,
8 that Dr. Hollin should have had a duty to make
9 a diagnosis of bacterial endocarditis in the
10 urgent care center on April -- sorry, on
11 February 18 of '99?

12 A. No, it was not his duty to diagnose
13 the patient with endocarditis. It was his duty
14 to recognize that this patient was extremely
15 high risk for having endocarditis and to ensure
16 that diagnostic testing was performed which
17 would help make that diagnosis and that the
18 patient was sent to a practice facility or
19 provider or health care provider such that they
20 could get treatment for presumptive
21 endocarditis.

22 Q. And one of the providers to provide
23 such treatment would be Ms. O'Donnell's primary
24 care physician, correct?

25 A. Correct.

Zola

1 Q. And Dr. Hollin did make a referral
2 to her primary care physician for follow-up,
3 correct?

4 A. Yes, but not for three to five days,
5 according to what is listed in his little
6 follow-up box on the front sheet from the
7 MedCenter, which was a deviation from standard
8 of care.

9 Q. But he did see that the diagnostic
10 test results were provided to the primary care
11 physician the following day, correct?

12 A. No, he did see that his incomplete
13 and inadequate diagnostic testing was provided
14 to her primary care physician the next day.

15 MR. MOSS: I'm going to move to
16 strike the characterization.

17 Q. He did see, Doctor, that the blood
18 work that he ordered and the chest X-ray that
19 he ordered, both of which are diagnostic tests,
20 were provided to her primary care physician the
21 following day, can we agree to that?

22 MR. MISHKIND: Note my objection.

23 A. I believe so. I'd have to go back
24 through Dr. Parris's records to determine when
25 precisely he received the CBC and the chest

Zola

1 X-ray from Dr. Hollin or from the MedCenter,
2 but I believe it was the next day.

3 Q. You have offered criticisms of
4 Dr. Kalucis and of Dr. Cuglewski in this case,
5 correct?

6 MR. MISHKIND: Objection.

7 Go ahead.

8 A. Yes.

9 Q. Is it your opinion from the
10 deviations from standard of care by
11 Drs. Kalucis, Cuglewski, were the proximate
12 cause of harm to this patient?

13 A. I can only say that both those
14 physicians, that their deviations from standard
15 of care reduced the likelihood of her not
16 having a stroke, and I'm making all these
17 opinions within a reasonable degree of medical
18 certainty or more likely than not; however, I
19 cannot say that their deviations more likely
20 than not caused her stroke.

21 Q. I understand, but what you are
22 saying is that their deviations increased the
23 likelihood or not -- that's not the way to say
24 it -- strike that.

25 Their deviations increased her

Zola

1 chance of having a stroke?

2 MR. MISHKIND: Objection, but go
3 ahead.

4 Q. May not prevented it, but increased
5 the chance of it occurring?

6 MR. MISHKIND: Same objection, but
7 go ahead.

8 A. Yes, I think that that's another way
9 of saying it.

10 Q. Okay.

11 Doctor, do you have an opinion --
12 well, let me back up.

13 Miss O'Donnell had just completed a
14 ten-day cycle of doxycycline when she saw
15 Dr. Hollin on February 18, '99 correct?

16 A. Yes.

17 Q. You would agree that that fact may
18 have resulted in blood cultures having -- if
19 blood cultures had been taken on the 18th, the
20 fact that the patient had just completed that
21 cycle of antibiotics may have resulted in those
22 cultures coming back negative?

23 MR. MISHKIND: Objection.

24 Go ahead.

25 A. No, it would not have since we

Zola

1 specifically know that the bug she grew out on
2 her valve was essentially resistant to that
3 antibiotic.

4 Q. You hold that opinion to the
5 reasonable degree of medical probability?

6 A. Yes.

7 Q. You would agree that the physicians
8 who treated her in the hospital had concerns
9 about the validity of the initial set of blood
10 cultures because of the patient's recent
11 antibiotic therapy, correct?

12 A. Correct, but at the same time, their
13 concerns involved her having had doxycycline
14 beforehand but specifically her being on Biaxin
15 at that point in time when she was
16 hospitalized.

17 Q. That's because Biaxin probably was
18 somewhat effective in treating the strep
19 viridans and Strep. mitis organisms that
20 Mrs. O'Donnell had, correct?

21 A. Yes, it would have been somewhat
22 effective, it wouldn't have cured it, it might
23 have suppressed it to some degree, and it might
24 have interfered with the ability to -- it might
25 have interfered with the ability to grow things

Zola

1 out in culture. Of course we know that it
2 actually did not interfere with the blood
3 cultures because she had her blood cultures
4 drawn upon hitting the emergency room and those
5 cultures grew out the organism.

6 Q. Is the fact that a patient has
7 undergone recent antibiotic therapy ever an
8 appropriate justification for delaying the
9 administration of antibiotics in a patient
10 who's suspected of having infectious
11 endocarditis?

12 MR. MISHKIND: Objection to the
13 form, but go ahead.

14 A. Yes, but only in a very clear-cut,
15 low risk case, that is, only when it's been
16 documented and felt that the patient's at low
17 risk for having complications from their
18 endocarditis, and therefore, the benefits of
19 waiting a short period of time and drawing
20 repeat blood cultures while antibiotics might
21 be clearing out of the bloodstream is that the
22 benefits outweigh the risks of not treating an
23 underlying, ongoing, potentially lethal
24 infection.

25 Q. Doctor, would you agree that the

Zola

1 criteria for diagnosing endocarditis are
2 positive blood cultures, positive
3 echocardiogram, new regurgitant murmur and
4 fever?

5 A. Those are some of the criteria. The
6 only one that really matters would be the
7 positive blood cultures in that in a patient
8 with positive blood cultures, I might have an
9 echocardiogram that doesn't show any
10 vegetations, but echocardiograms only show a
11 certain amount, and you can have small
12 vegetations that won't show up on an
13 echocardiogram, you may also have no change in
14 the patient's heart murmur if the endocarditis
15 is very early when it's caught and hasn't
16 significantly damaged the valve.

17 So the reality is it's the positive
18 blood cultures that, by definition, mean that
19 there's an infection in the bloodstream and if
20 a patient has any history of rheumatic fever in
21 the past or any abnormalities of their heart
22 valve, then it almost needs to be -- it almost
23 needs to be presumed according to the standard
24 of care that that patient has an infected heart
25 valve. In other words, you have to go out of

Zola

1 your way to prove that the valve is not
2 infected.

3 Q. Is there any evidence in that
4 record, Doctor, that this patient --

5 A. Sorry, let me finish my answer too
6 because I've been thinking about it a little
7 bit more.

8 The other thing is that it also
9 depends very strongly on the organism involved,
10 and with Strep. mitis of viridan strep species
11 like this, this is the type of bug that is
12 absolutely classic for infecting the heart
13 valve. There are very few other types of
14 things that you're likely to see this type of
15 bloodstream infection in with this type of
16 organism, although a sinus abscess or a tooth
17 abscess or something like that might cause the
18 patient to have bacterium or bacteria in the
19 blood stream from that particular bug, but
20 without question in a patient with no other
21 source of infection with a damaged heart valve
22 and Strep. mitis in the bloodstream, then the
23 diagnosis will be endocarditis or Strep. mitis
24 infection of the heart valve.

25 Q. Thank you, Doctor.

Zola

1 Based upon your review of these
2 records, have you seen any evidence
3 pathologically that this woman had rheumatic
4 heart disease?

5 A. Yes.

6 Q. Where have you seen that?

7 A. On her echo from 1/28/99 and then on
8 the subsequent echos. The echo from 1/28/99
9 has changes on the valves that are very
10 consistent with rheumatic heart disease. Now,
11 at the same time they are also consistent with
12 a valve with rheumatic heart disease that's
13 been infected.

14 Q. So that, in your opinion, is
15 significant to determine that this patient, in
16 fact, had rheumatic heart disease?

17 A. Yes, with her history of having been
18 hospitalized with rheumatic fever and with
19 those echocardiographic findings, then more
20 likely than not this patient has underlying
21 rheumatic heart disease.

22 Q. What exact findings on the echo are
23 you referring to?

24 A. The pattern of thickening of her
25 heart valves.

Zola

1 Q. What is that pattern?

2 A. That her valves are thickened all
3 the way throughout.

4 Q. Why is that indicative of rheumatic
5 heart disease?

6 A. Because there are -- at her age and
7 without any other types of illnesses, there are
8 very few things that will thicken the heart
9 valves like that, and given her past history of
10 rheumatic fever, then it's overwhelmingly
11 likely she has underlying rheumatic heart
12 disease. This is not a mystery and this is not
13 very difficult, this is very straightforward.

14 Q. Did you review the pathology after
15 the removal of her valve?

16 A. At some point, yes.

17 Q. Is there any histopathological
18 evidence there that this valve was, in fact,
19 diseased with rheumatic disease?

20 A. I don't think it was necessarily
21 adequately addressed, but you want to put the
22 report in front of me, if you know where it is
23 without having me go throughout all the records
24 to find it.

25 If you want, I will review the

Zola

1 report with you now or do you want to just keep
2 moving on?

3 Q. I just want you to answer my
4 question and I'd like to move on too.

5 A. Okay. Then I'll leave my answer the
6 way I left it.

7 Q. Well, I guess I'm not sure what your
8 answer is. Did you see any evidence in the
9 report?

10 A. As we speak, I can't recall, I'd
11 have to go back and look at the report again.

12 Q. I would like an answer then.

13 MR. MISHKIND: He's doing that right
14 now.

15 A. Do you have the report in front of
16 you, by any chance?

17 Q. I'm looking for it myself.

18 MR. MISHKIND: We are all looking
19 for it now, David.

20 Q. I'm convinced I don't have it with
21 me.

22 MR. MISHKIND: The doctor is looking
23 at the operative report, but I don't think
24 any of us are locating the path report
25 very readily, David.

Zola

1 I've got the surgical report which
2 doesn't really say much of anything. I'm
3 not sure we can address --

4 MR. MOSS: Let's just leave the
5 record as it is at this point.

6 MR. MISHKIND: Okay. Obviously if
7 there was something specific to it...

8 A. I'll be more than happy to answer
9 questions on it when we find it in either
10 interrogatory form or if you want to do a
11 telephone continue of this for ten minutes or
12 something, we'll do whatever you want to do.

13 Q. Doctor, have you ever spoken or
14 given presentations to any attorney groups?

15 A. Not that I know of. Well, I mean,
16 as like a formal lecture or speech?

17 Q. I'm talking about, you know,
18 continuing legal education seminars or groups
19 of attorneys that are getting together for a
20 particular -- to review a particular issue.

21 A. I wish, but no, I haven't.

22 Q. Are there any particular texts that
23 you consider important or particularly reliable
24 on any of the issues that you are testifying
25 about in this case?

Zola

1 MR. MISHKIND: Objection to the form
2 of the question, but go ahead, Doctor.

3 A. No, not specifically.

4 Q. Have you done any specific research
5 in connection with this case?

6 A. No, it wasn't necessary. The facets
7 of this case are very, very straightforward.

8 Q. The temperature that was recorded at
9 the time Dr. Hollin saw Mrs. O'Donnell in the
10 urgent care facility was 100.0, correct?

11 A. Yes.

12 Q. Is there anything to indicate that
13 Mrs. O'Donnell ever reported the temperatures
14 of 103.8 or 104.4, I think it was that you
15 mentioned, to Dr. Hollin?

16 A. No, not in the medical records of
17 Dr. Hollin, no, those are listed in
18 Dr. Parris's records.

19 Q. The opinion that you've offered that
20 had Mrs. O'Donnell been diagnosed and treated
21 earlier, it would have diminished the chance
22 that she had a stroke, can you quantify how
23 much that chance would have been diminished?

24 MR. MISHKIND: I'm going to object
25 to the form of the question because you --

Zola

1 he has testified to a probability on
2 certain dates, he's testified, reduce
3 chance on other dates, you've just sort of
4 thrown that out in general, so note my
5 objection to the form of your question,
6 David.

7 A. I would also say, I can't really
8 answer that unless you get more specific.

9 Q. Well, let me ask it this way: At
10 any point in time, can you say -- can you
11 quantify -- at any point in time, can you
12 quantify the degree to which Mrs. O'Donnell's
13 chance of suffering a stroke would have been
14 diminished had treatment been instituted?

15 MR. MISHKIND: Objection.

16 A. I've already answered that question.
17 I said, you know, all the way up until, say,
18 the morning of 2/26/99, having treated her with
19 antibiotics -- appropriate antibiotics
20 intravenously before that time would have
21 diminished her chance of a stroke.

22 Q. What I'm getting at, how much would
23 it have diminished?

24 A. I can't give you a number. I can
25 only say it would have diminished it. It's

Zola

1 obviously a smaller and smaller amount. The
2 later and later in the course of her illness
3 that the doctors waited such that on
4 February 21 or 22, thereabouts, that's the
5 approximate time when treatment with
6 antibiotics no longer had a 51 percent chance
7 or more of preventing a stroke in
8 Mrs. O'Donnell.

9 Q. And why is it that you select that
10 date?

11 A. Because of the appearance of the
12 mobile vegetation on 2/25 which was
13 approximately four days later, because of how
14 long it takes to draw blood cultures, start
15 antibiotics, get the patient into the hospital,
16 all those sorts of things. I think
17 approximately four or five days would -- sorry,
18 I think three or four days would be a
19 reasonable amount of time to have gotten in
20 there before the 25th and started her on
21 antibiotics and that that would have likely
22 have prevented her stroke.

23 After that point in time, I just
24 think the closer and closer you get to the
25 25th, the more likely that that vegetation is

Zola

1 already there and mobile and growing further
2 and, of course, not only is it mobile and
3 flopping around like on a stalk, but the head
4 of it is growing even more and getting heavier
5 and heavier, making it more likely to break off
6 and cause a stroke.

7 So I'm trying my best to give you a
8 time period in which it was more likely to not
9 happen if you treated her with antibiotics, but
10 after that point in time, I can't be that
11 precise except to say that it's less of a
12 chance.

13 Q. How large a hospital is North Shore
14 University Hospital at Forest Hills?

15 A. I honestly don't know. I don't keep
16 track of it. It's a community hospital in the
17 New York City area. I couldn't tell you if
18 it's 300 beds or 500 beds.

19 Q. You have no idea?

20 A. I honestly don't know. It changes
21 every month, when they close down one unit or
22 open up another unit, I don't even know what
23 counts as inpatient or outpatient these days.
24 They have all these outpatient centers treating
25 patients in the hospital, but I think they

Zola

1 count as outpatient not as inpatient beds, so I
2 don't --

3 Q. Give me a range.

4 A. I would say it's a medium-sized
5 community hospital.

6 Q. Give me a range of beds.

7 A. I can't do that. I would guess 300
8 beds, I don't know.

9 MR. MISHKIND: It's okay if you
10 can't, that's your best answer.

11 Q. Participating in some studies of
12 cholesterol controlled medications and medical
13 devices at New York Hospital and Lenox Hill, do
14 you recall that testimony several hours ago?

15 A. Yes.

16 Q. You have no active role in actually
17 conducting those studies, correct?

18 A. With the exception of actually
19 taking care of the patients in my practice and
20 referring to the -- referring them or enrolling
21 them in those studies, no.

22 MR. MOSS: Thank you, Doctor, those
23 are all the questions I have.

24 THE WITNESS: You guys realize it's
25 after 2 o'clock?

Zola

1 MR. MISHKIND: Shortly.

2 EXAMINATION BY

3 MR. DZENITIS:

4 Q. My name is Paul Dzenitis, I
5 represent Dr. Zirafi. That doesn't count as a
6 question.

7 You did not identify any criticisms
8 of Dr. Zirafi in your January 17, 2001 report,
9 correct?

10 A. Correct.

11 Q. You are of the opinion, and I think
12 you testified, that Dr. Zirafi acted reasonably
13 in treating Ms. O'Donnell?

14 A. Yes.

15 Q. Nonetheless, Ms. O'Donnell had
16 infective endocarditis on January 25, 1999?

17 A. Yes.

18 Q. How is it that Dr. Zirafi could be
19 acting reasonably when she's a cardiologist,
20 she has specialized training in this area and
21 Ms. O'Donnell has infectious endocarditis when
22 she sees her?

23 A. Because her infectious endocarditis
24 at that time was subacute, also maybe
25 subclinical, as it's called, in other words,

Zola

1 she didn't have clinical symptoms or findings
2 at that point in time to indicate that she had
3 an underlying infection. It was brewing
4 underneath. It is also possible that Maria
5 O'Donnell had taken antibiotics on her own some
6 time soon before she saw Dr. Zirafi which
7 basically suppressed all of her symptoms and
8 made her look healthy or healthier at that
9 point in time such that there was nothing going
10 on at that time that would have clued
11 Dr. Zirafi in -- or clued in Dr. Zirafi to the
12 idea that she had an active infection that was
13 active at that point in time.

14 So if -- and again, I've already
15 answered the hypothetical, if it turns out that
16 Dr. Zirafi did somehow know that she had a
17 fever at that point or that she had just had a
18 fever the day before or, you know, very, very
19 shortly before that or had had a long series of
20 fevers beforehand or had spiking fevers or
21 intermittent fevers, it's a whole different
22 issue, but that's very clearly not documented
23 in her well-documented, thorough and
24 well-written report, so there's no reason to
25 think that -- that she didn't take that history

Zola

1 appropriately and get that history.

2 Q. You were asked questions about
3 communication of the results of the
4 echocardiogram to the other medical doctors,
5 and I think you indicated that you would have
6 done things differently, but you didn't think
7 that Dr. Zirafi deviated from the standard of
8 care in her actions; is that correct?

9 A. Correct.

10 Q. Why is it your opinion that she did
11 not deviate from the standard of care in
12 communicating the results of the
13 echocardiogram?

14 A. Well, because the results of the
15 echocardiogram did not require emergency
16 notification of anyone. They really just
17 required making sure that Maria O'Donnell had a
18 physician that was going to take care of her,
19 that knew she had rheumatic heart disease, that
20 knew she had mitral regurgitation and that
21 should have known, therefore, that Maria
22 O'Donnell would have needed antibiotics before
23 dental work, which she was taking already
24 anyway, that sort of thing, for general
25 informational purposes and routine medical care

Zola

1 and follow-up, but it wasn't an emergency.

2 So whereas I would have followed up
3 with a patient specifically and made sure that
4 the patient knew and told the patient that she
5 needed to notify me when she saw the other
6 doctor so we could be sure to get that
7 information to the other doctor, as long as
8 that information got to the other doctor and as
9 long as Maria O'Donnell was being followed by
10 another doctor such as Dr. Parris, then it
11 was -- then things got done.

12 Q. Let's assume there were not results,
13 or the information from the report was not
14 given to the subsequent treating physicians.
15 Was there sufficient information on February 8
16 for the physician treating her to order the
17 proper tests resulting in the diagnosis of
18 infective endocarditis?

19 MS. MOODY: Objection.

20 A. Absolutely, in that we've already
21 discussed that they -- Dr. Parris knew on
22 February 8, again, from that intake form, from
23 the other things we've discussed, that she had
24 a history of rheumatic heart disease, that she
25 had a history of a particularly high fever at

Zola

1 103.8 and 104.4, and therefore, was extremely
2 high risk for having underlying endocarditis,
3 so it almost doesn't matter what the results of
4 her echocardiogram were or were not beforehand.
5 The same thing would have still needed to be
6 done, which is the diagnostic testing that I
7 said to help make the diagnosis of infectious
8 endocarditis.

9 Q. In your words, did it matter what
10 the results of the echocardiogram tests were to
11 the physicians treating her on February 11?

12 A. No, it did not. Again, if they had
13 seen the echo, perhaps it would -- might have
14 stimulated them to be more vigorous in ordering
15 the blood tests on this patient, but you don't
16 need the echocardiogram results to know that
17 the patient has a history of rheumatic heart
18 disease.

19 Q. Same question with February 18?

20 A. Same answer all the way through.

21 Q. And February 22?

22 A. Same answer all the way through.

23 Q. Do you spend over 50 percent of your
24 professional time in the active practice of
25 medicine or teaching?

Zola

1 A. If you mean by medicine, medicine --
2 internal medicine and cardiology, yes, as I've
3 already answered, I spend -- maybe you didn't
4 hear it before because it was before, but it's
5 more than 90 percent.

6 Q. And you're licensed to practice
7 medicine in New York?

8 A. Yes.

9 Q. Are you familiar with the standard
10 of care as it applies to internal medicine
11 physicians?

12 A. Yes.

13 MR. DZENITIS: Thank you.

14 MR. MISHKIND: Any follow-up?

15 MS. HARRIS: I just have a couple of
16 questions and I'll be real quick, Doctor.

17 FURTHER EXAMINATION

18 BY MS. HARRIS:

19 Q. The closer that you get to the
20 stroke, the chances of her having a stroke
21 increase without antibiotics; is that correct?
22 Does that make sense to you, Doctor?

23 A. No, it doesn't really because the
24 chances of her having a stroke without
25 antibiotics are increased all the way through.

Zola

1 I'm not sure what the antibiotics have to do
2 with it one way or the other. In fact, I just
3 don't understand your question. Let's start
4 again.

5 Q. She would have a better chance not
6 having the stroke on the 22nd as opposed to the
7 24th if antibiotics were given, correct?

8 A. Yes.

9 Q. You just can't quantify that amount;
10 is that right?

11 A. No, I just can't -- yes, that's true
12 in the sense that I can't quantify it at more
13 than 50 percent likelihood of them preventing
14 the stroke after approximately the 22nd of
15 February.

16 Q. You can't give us -- regardless of
17 whether it's 50 percent or not, you can't give
18 us a percentage at all?

19 A. No, because it's less than
20 50 percent and then it just keeps diminishing
21 the closer and closer you get to the stroke.
22 That is, the likelihood of them preventing a
23 stroke with antibiotics is less than 50 percent
24 after approximately February 22nd and that
25 likelihood of preventing a stroke diminishes

Zola

1 every day, every moment, every hour after the
2 22nd as you approach the 26th of February.

3 Q. I appreciate that and I just -- so
4 you can't say what the percentage chance would
5 be on the 24th versus the 25th versus the
6 evening of the 25th?

7 MR. MISHKIND: Objection.

8 Q. That's all I want to know.

9 MR. MISHKIND: Objection, asked and
10 answered.

11 Go ahead.

12 A. I -- yes, I believe the answer to
13 that is yes.

14 MR. MISHKIND: That's it. Thank
15 you, Doctor.

16 Doctor will read and please extend
17 the 7 day to 28 days for signature all
18 counsel.

19 (Time noted: 2:15 p.m.)
20
21
22
23
24
25

A C K N O W L E D G M E N T

STATE OF NEW YORK)
 : ss
COUNTY OF)

I, BENJAMIN E. ZOLA, MD, hereby
certify that I have read the transcript of my
testimony taken under oath in my deposition of
June 4, 2003; that the transcript is a true,
complete and correct record of my testimony,
and that the answers on the record as given by
me are true and correct.

BENJAMIN E. ZOLA, MD

Signed and subscribed to before me
this _____ day of _____, 2003

Notary Public, State of New York

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C E R T I F I C A T E

STATE OF New York)
:ss
COUNTY OF Richmond)

I, RITA M. PERSICHETTY, a Notary
Public within and for the State of New York, do
hereby certify:

That BENJAMIN E. ZOLA, MD, the
witness whose deposition is hereinbefore set
forth, was duly sworn by me and that such
deposition is a true record of the testimony
given by such witness.

I further certify that I am not
related to any of the parties to this action by
blood or marriage; and that I am in no way
interested in the outcome of this matter.

IN WITNESS WHEREOF, I have hereunto
set my hand this 16th day of June, 2003.


RITA M. PERSICHETTY

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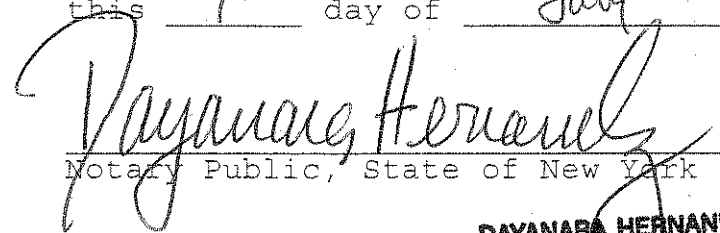
A C K N O W L E D G M E N T

STATE OF NEW YORK)
) : ss
COUNTY OF MANHATTAN)

I, BENJAMIN E. ZOLA, MD, hereby
certify that I have read the transcript of my
testimony taken under oath in my deposition of
June 4, 2003; that the transcript is a true,
complete and correct record of my testimony,
and that the answers on the record as given by
me are true and correct.


BENJAMIN E. ZOLA, MD

Signed and subscribed to before me
this 7th day of July, 2003


Notary Public, State of New York

DAYANARA HERNANDEZ
Notary Public, State of New York
No. 01HE6088148
Qualified in Bronx County
Commission Expires March 3, 2007

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