2017 Tournament Problem

No. 16–0093–CV

Louis and Louise Keating,	§	In the 143rd District Court
	§	
Plaintiffs,	§	
	§	
v.	§	in and for
	§	
Alastor City University Hospital,	§	
Dr. Walter Wallace, and	§	
Dr. Zoe Brockette,	§	
	§	
Defendants.	§	Capitol County, South Texas

PRETRIAL CONFERENCE REPORT

After a hearing before the Court with counsel for both parties present, the Court determines:

1. This is a lawsuit to recover damages and a royalty interest in a patent arising from the use of excised stem cells in lucrative medical research without permission.

2. Louis and Louise Keating brought this suit, claiming Dr. Walter Wallace, Dr. Zoe Brockette, and Alastor City University Hospital improperly used removed stem cell tissue from the body of the Keatings' daughter for research unrelated to her treatment. The excised stem cells were used to create cell lines, and those cell lines were used to develop a new drug for which Dr. Wallace and Dr. Brockette obtained a patent. The stem cell research based on the use of the stem cells removed from

the Keatings' daughter has and will continue to provide significant income to the defendants.

3. The Keatings have asserted claims for battery by not obtaining informed consent, breach of fiduciary duty, and unjust enrichment, which the Defendants generally denied.

4. This Court granted summary judgment on liability. By not obtaining the necessary informed consent, no genuine issue of material fact exists as to whether the defendants are liable on each of the substantive claims.

5. The parties have identified Exhibits B – X to this Pretrial Conference Report as documents pertaining to this proceeding. The parties have also identified Exhibits E – K as the depositions taken in this case. The method of identification was used by the parties throughout the discovery phase of this case, including throughout the depositions of each of the witnesses.

6. Exhibits Q – X are original and authentic.

7. Plaintiffs will call Louis Keating or Louise Keating and Pat Byer as witnesses. They are available to appear at trial. In addition, Plaintiffs may offer the testimony of Scott Straus, Natalie Masood, and Malik Verlaine by deposition. Plaintiffs may also offer the deposition testimony of whichever Plaintiff is not called live. All witnesses were properly listed by Plaintiffs.

8. Defendant will call Walter Wallace or Zoe Brockette and Sam Stevens as witnesses. Both are available to appear at trial. In addition, Defendants may offer the testimony of Scott Straus, Natalie

Masood, and Malik Verlaine by deposition. Defendants may also offer the deposition testimony of whichever Defendants is not called live. All witnesses were properly listed by Defendants.

9. The matter is set for a jury trial on damages beginning March 29, 2017.

10. All depositions and transcripts of testimony were signed under oath.

11. The parties have stipulated that Scott Straus, Natalie Massod, Malik Verlaine, and whichever of the named parties who are not called live are unavailable for purposes of Federal Rule of Evidence 804 and may be called by deposition.

12. Each expert's qualifications and methodology meet the standards under the Federal Rules of Civil Procedure. Attorneys need not tender the expert. The experts' reports and resumes are admissible, in whole or part, under Local Rule 5.003.

13. Neither party has challenged the qualifications or methodology of the other side's expert witness. No further objections to their qualifications or methodology will be entertained.

14. Other than what is contained in Exhibits B - X, there is nothing exceptional or unusual about the background information of any of the witnesses that would bolster or detract from their credibility.

15. The Court has already denied a motion to dismiss. No further motions to dismiss will be entertained before trial.

16. This Court drafts its own verdict forms. The Court will not accept amendments or additions to Exhibit A.

SIGNED this 27th day of February, 2017.

/s/ Sarah Watson

_____

JUDGE PRESIDING

ATTACHMENTS

A. Verdict Form

B. First Amended Petition

C. Answer

D. Order on Motion for Summary Judgment

E. Deposition of Louis Keating

F. Deposition of Louise Keating

G. Deposition of Walter Wallace

H. Deposition of Zoe Brockette

I. Deposition of Scott Straus

J. Deposition of Natalie Masood

K. Deposition of Malik Verlaine

L. Expert Report of Pat Byers

M. CV of Pat Byers

N. Supplement to Expert Report of Pat Byers

O. Expert Report of Sam Stevens

P. CV of Sam Stevens

Q. Photos of Etta Keating

R. Patent Assignment

S. Informed Consent Form

T. Revised Informed Consent Form

U. Business Records from Alastor City University

V. Billing Records from Alasor City University Hospital

W. Test Results

X. Newspaper Article

Verdict Form

QUESTION 1

What sum of money, if any, if paid now in cash, would fairly and reasonably compensate Louis and Louise Keating?

Answer in dollars and cents, for damages, if any.

Answer: $_____

QUESTION 2

Are Louis and Louise Keating entitled to receive an assignment of the revenue generated by helolirsen patent?

Answer “Yes” or “No.”

Answer: _____

Answer Question No. 3 if your answer to Question No. 2 is "Yes." Otherwise, do not answer Question No. 3.

QUESTION 3

What percentage of the the revenue generated by helolirsen patent should Louis and Louise Keating receive?

Answer with a percentage from 1 to 100.

Answer: _____ %

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v.	§	in and for
	§	
Alastor City University Hospital,	§	
Dr. Walter Wallace, and	§	
Dr. Zoe Brockette,	§	
	§	
Defendants.	§	Capitol County, South Texas

FIRST AMENDED PETITION

Louis and Louise Keating ("the Keatings") bring this lawsuit, complaining of the actions of Alastor City University Hospital and two of its employees, Dr. Walter Wallace and Dr. Zoe Brockette.

Parties

The Keatings are South Texas residents.

Alastor City University Hospital is a non-profit corporation organized under South Texas law and has already answered.

Dr. Walter Wallace is a South Texas resident and has already answered.

Dr. Zoe Brockette is a South Texas resident and has already answered.

Jurisdiction and Venue

The subject matter in controversy is within the Court's jurisdictional limits. Venue in Capitol County is proper because all or a substantial part of the events or omissions giving rise to this lawsuit occurred here.

Facts

Louis and Louise Keating's daughter, Etta, was severely injured in a traffic accident on April 1, 2013. Etta was transported to Alastor City University Hospital and treated for her injuries. A few days later, Dr. Walter Wallace and Dr. Zoe Brockette performed a procedure on Etta to remove stem cells from her bone marrow so that those cells could be used later for Etta's benefit. But the stem cell therapy was never performed because Etta died before it could be done. Defendants chose not to destroy the stem cells even though hospital policy required it, the treating doctor told the parents the cells would be destroyed, and the Keatings indicated this was what they wanted. And to make matters worse, the Keatings learned that Dr. Wallace and Dr. Brockette had taken extra stem cells from Etta when they performed the procedure.

With these wrongfully obtained stem cells, Defendants furthered their own research and their own economic interests. Defendants now own a patent for hololirsen, which is being marketed as Helojuvenex by Bell Pharmaceuticals.

Defendants have received millions of dollars based on this patent and their use of Etta's stem cells. They will continue to do so in the future.

Causes of Action

No Informed Consent. Defendants excised tissue from Etta for research purposes without obtaining informed consent of the Keatings. Defendants failed to advise the Keatings before, during, or after the surgery of their intent to remove the tissue for research purposes. Defendants also failed to advise the Keatings of the risks, dangers, and consequences associated with doing so.

Battery. Having exceeded the scope of consent for treatment of Etta, Defendants' actions constituted a battery.

Breach of Fiduciary Duty. As doctors providing medical care to Etta Keating, Dr. Wallace and Dr. Brockette had a fiduciary duty to act in Etta's and her parents' best interests. Because the doctors were employees and agents of Alastor City University Hospital, the hospital is responsible for their actions. Defendants had a duty to disclose—honestly, fairly and in good faith—all material information related to the economic interests of the doctors' research not associated with Etta's treatment. Defendants exploited their positions to their own financial benefit and, in doing so, breached these fiduciary duties. Defendants' actions damaged the Keatings.

Unjust Enrichment. Without consent, Defendants excised, retained, and tested Etta's tissue. All of Defendants' discoveries—together with the resulting profits derived from them—can be traced to the removal of Etta's tissue without her consent. Under these circumstances, it would be unjust for Defendants to retain these ill-gotten gains.

Jury Demand

The Keatings request that the issue be resolved by a jury. The appropriate jury fee has been paid.

Prayer

Plaintiffs Louis and Louise Keating ask for judgment:

- that awards actual damages;
- that awards plaintiffs a share of the royalty interest related to the helolirsen patent; and
- for all other relief, in law or in equity, to which they may be entitled.

Respectfully submitted,

CHANNARAYAPATRA & CHENG, L.L.P.

/s/ Angie Cheng
By:_____
ANGIE CHENG
State Bar No. 12875995

1600 Delaware
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294.435.2000 (Phone)
294.435.2026 (Fax)

ATTORNEY FOR PLAINTIFFS
LOUIS AND LOUISE KEATING

DATE: November 12, 2016

No. 16–0093–CV

Louis and Louise Keating	§	In the 143rd District Court
	§	
v.	§	in and for
	§	
Alastor City University Hospital,	§	
Dr. Walter Wallace, and	§	
Dr. Zoe Brockette	§	Capitol County, South Texas

ANSWER

Alastor City University Hospital, Dr. Walter Wallace, and Dr. Zoe Brockette generally deny the allegations in the petition. Defendants ask that this Court enter a take-nothing judgment in their favor.

Respectfully submitted,

THE DIAZ LAW FIRM, P.C.

/s/ Nina Diaz
By:_____
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294.733.7055 (Fax)

ATTORNEY FOR DEFENDANTS
ALASTOR CITY UNIVERSITY
HOSPITAL, DR. WALTER WALLACE,
AND DR. ZOE BROCKETTE

DATE: November 24, 2016

No. 16–0093–CV

Louis and Louise Keating,	§	In the 143rd District Court
	§	
Plaintiffs,	§	
	§	
v.	§	in and for
	§	
Alastor City University Hospital,	§	
Dr. Walter Wallace, and	§	
Dr. Zoe Brockette,	§	
	§	
Defendants.	§	Capitol County, South Texas

ORDER GRANTING PARTIAL SUMMARY JUDGMENT

This Court grants partial summary judgment for Plaintiffs on liability. As a matter of law, Defendants committed battery, breached fiduciary duties, and were unjustly enriched when medical procedures were performed on the Plaintiffs' minor child without Plaintiffs' consent.

Defendants have asked that this Court certify this case for an interlocutory appeal, in the event this Court were to grant summary judgment for Plaintiffs on liability. This Court denies that request and orders that this case proceed to trial on the merits.

/s/ Sarah Watson

JUDGE PRESIDING

DATE: January 16, 2017.

DEPOSITION OF LOUIS KEATING
January 5, 2017

EXAMINATION BY MS. CHENG:

Q: What is your name?

A: Louis Keating.

Q: How old are you?

A: 35.

Q: Where do you live?

A: Bunker Hill.

Q: And that is in South Texas?

A: Yes.

Q: But is Bunker Hill a suburb of Alastor City?

A: It is. On the north end.

Q: Where do you work?

A: In Alastor City. At a place called Second Chances.

Q: What is Second Chances?

A: It is a treatment facility near the park. One of the Alastors started it a few years ago after he went through rehab. He was so appreciative that he poured his inheritance into this facility to help those who don't have the

money to get the best treatment available. Now anyone can get help at Second Chances. Help with rehab. Help with psychological problems. Help with counseling. Help with many other things. Second Chances is a place for healing.

Q: What do you do there?

A: All kinds of things. I think I would be called a groundskeeper and handyman. But I help out with anything I can.

Q: How long have you worked there?

A: Since it opened six years ago.

Q: How much do you make?

A: 750 dollars a week. And I get my insurance paid.

Q: Tell me about your insurance.

A: Second Chances provides me and my family with insurance because I work there.

Q: Do you have to pay for it?

A: Not directly. It is treated as part of my compensation. Second Chances provides it to all employees. The company directly pays the premiums.

Q: Who does the insurance cover?

A: My immediate family.

Q: And who is that?

A: Me. My wife, Louise. My son, Simon. And it covered my daughter, Etta, until she passed away.

Q: Okay. How old is Simon?

A: He is ten.

Q: So he was older than Etta?

A: Yes.

Q: Okay. Let’s talk about Etta.

A: Okay.

Q: When was she born?

A: March 17, 2009.

Q: Where?

A: At Charity Hospital here in Alastor City.

Q: Tell us about her.

A: She was such a happy child. The light of our lives.

Q: When did you discover she was sick?

A: Not until the accident.

Q: Okay. Let’s talk about that.

A: Okay.

Q: When did the accident occur?

A: On April 1st.

Q: What year?

A: 2013.

Q: Where?

A: On Ranch Road, near the Bunker Hill Mall.

Q: I know its painful but please let us know what was happening that day.

A: My wife and I were both working so Louise’s sister, Lauren, was keeping Etta for us.

Q: Where was Simon?

A: He was at preschool. He was six years old at the time.

Q: Okay. I apologize. I interrupted you. Please continue telling us what was happening that day.

A: Okay. Louise's sister decided to take Etta to the Zoo to see the Grizzly Bears. They did that often. It was their thing. Lauren called Etta her little bear.

Q: What was her full name?

A: Lauren Durand.

Q: And she was Louise's older sister?

A: No. She was two years younger than Louise.

Q: Was she married?

A: Nope. Never met the right person.

Q: What did Lauren do?

A: She worked at a department store. Excelsior. She worked in the housewares department.

Q: She wasn't working on the day of the accident?

A: No. I remember it was a Monday. She worked on the weekend so Lauren had Mondays and Wednesdays off. On those days, she came over to our apartment before we left for work, had breakfast, and then stayed with Etta.

DEPOSITION OF LOUIS KEATING
January 5, 2017

Q: Where was your apartment?

A: In Bunker Hill. Near the elementary school.

Q: Where did Lauren live?

A: In an apartment near the airport. About ten minutes from our house.

Q: Do you remember anything in particular about that morning?

A: Only that Lauren was running late. I was worried that I would be late to work.

Q: When did you have to get to work?

A: By 8:00.

Q: What about Louise?

A: She had to be at work by 10:00 because she was working the lunch shift but she had a bunch of errands to run that day and wanted to leave the house when I did.

Q: When did Lauren get to the house?

A: About 7:45.

Q: Did you make it to work on time?

A: Barely.

Q: What happened next?

A: As soon as I got to work, I started placing mulch around the trees and shrubs near the main building at Second Chances. About 11:30, Kelly Shepherd came running outside, looking for me. He told me that there had been an accident.

Q: What did you do next?

A: At first, I asked Kelly questions.

Q: What do you mean?

A: I asked who was in an accident? I thought it was Louise because I didn't realize that Lauren had plans to leave the house. Louise knew they were going out. But I didn't. Afterwards, Kelly drove me to the hospital.

Q: When did you get to the hospital?

A: Shortly after noon.

Q: What happened when you got to the hospital?

A: Louise and I talked to the doctor.

Q: Was she with you?

A: By then, she was.

Q: Which doctor did you talk to?

A: Scott Straus. He was the one taking care of Etta.

Q: What did he tell you?

A: That Etta was in bad shape. She had been in a horrible accident. A driver ran a red light and hit Lauren's car right on the driver's side. Lauren didn't make it. She died at the scene. Etta's car seat was on the driver's side as well so it was really bad.

Q: What kind of car did Lauren drive?

A: It was a Kia Soul.

Q: Okay. Was Louise there with you when you talked to Dr. Straus?

A: She was.

Q: Did you have to sign papers?

A: I did. I don't remember all I signed because we were really concerned about what was happening with Etta and we were heartbroken about Lauren.

Q: Was Etta taken directly into surgery?

A: Yes. But it was just to get her under control.

Q: What do you mean?

A: They told us that she couldn't handle surgery yet so they were just going to stabilize her. I think to stop all the bleeding.

Q: Who was the they?

A: I'm not entirely sure. We only spoke to Dr. Straus.

Q: Was Etta awake when she got to the hospital?

A: No, she wasn't. She was unconscious.

Q: When were they going to perform the surgery?

A: The following day.

Q: What else did Dr. Straus tell you?

A: That Etta's situation was touch and go.

Q: What did you take from that?

A: That she could die at any moment.

Q: How did you deal with that?

A: Not well. But I had to stay strong for my family.

Q: Where was Simon?

A: My parents drove in from Laketown to take care of him.

Q: How far away is that?

A: About an hour from Alastor City. They picked Simon up from school Monday afternoon, took him to our apartment and stayed with him.

Q: What do your parents do?

A: My mom is a housewife and my dad is a truckdriver.

Q: Okay. What happened next?

A: We spent the next week at the hospital. It was a nightmare. Etta never woke up. They performed the first surgery on her Tuesday afternoon.

Q: What did they tell you about the first surgery?

A: That there was a lot of bleeding. They couldn't do a lot. They were still trying to stop the bleeding but they had to wait for some of the swelling to go down.

Q: Did they tell you anything else?

A: That some test had been run.

Q: What kind of test?

A: Not sure. But they said she had Muscular Dystrophy. We didn't know that.

Q: Did they say that it was severe?

A: I don't remember but at that point, everything was severe.

Q: Did she have another surgery?

A: Yes. On Thursday.

Q: What did you understand that second surgery was for?

A: Not really at the time. Dr. Straus told us that he had to take out her spleen and that he wanted to take some cells out to help make her better.

Q: What kind of cells?

A: Her stem cells.

Q: Okay. Did anyone explain the specifics of the second surgery — the one taking place Thursday morning?

A: In very general terms. I got the impression they didn't want to upset me or they thought I was stupid. I'm not sure which.

Q: What did you understand was to happen during the second surgery?

A: Her spleen was coming out. Dr. Straus also told me they were going to take out some of her cells and hold on to them so they could give them back to her later. Using her own cells would be better because there

would be less of a chance she would reject them. And her body was so weak. We were worried about how much she could take.

Q: Did you know Dr. Wallace and Dr. Brockette were treating Etta?

A: No. I knew others were helping Dr. Straus. But he was our guy. He is the one we talked to.

Q: Okay. How did she do during the surgery?

A: Fine, I think. I thought this was just something she had to make it through. It wasn't something that was going to make her better immediately. She was so weak so everything they did to her was a big concern for us. We worried about it. That's all we did. But they told us that it could make her better so we eventually said it was okay.

Q: Did she ever get better?

A: No. She got weaker and weaker. Over the weekend, we thought we could lose her at any minute.

Q: When did you lose her?

A: Two and a half weeks later.

Q: What did they tell you happened?

A: Dr. Straus said the accident caused too much damage and she was so weak. Her body couldn't take it anymore. And they figured out that she had muscular dystrophy and that somehow made matters worse.

Q: How did they discover that?

A: Not sure. Apparently some test.

Q: Did Dr. Straus tell you and Louise anything else?

A: I asked about the cells they had taken from Etta because they had made such a big deal about it before the surgery. He said that the cells they had pulled to help with Etta's treatment would be destroyed because she hadn't made it.

Q: Did you understand that was hospital policy?

A: I assumed so. But I didn't ask because he specifically told me the cells were going to be destroyed.

Q: What did you do next?

A: We buried our baby.

Q: Okay. Let me switch gears for a second. What is your educational background?

A: I graduated from high school and then I went to a small college for a couple years.

Q: What college?

A: Bunker Hill College.

Q: Where's that?

A: In our neighborhood. It is a small college with about 350 students.

Q: Did you graduate?

A: No. I think I have 47 hours or something like that.

Q: What were you studying?

A: I was in the business department. I had the basic classes and stopped before I got to the specifics.

Q: Why did you stop?

A: Money. I ran out. I couldn't afford it.

Q: What did you do afterwards?

A: Switched to full time where I was working.

Q: Where was that?

A: Lowe's.

Q: What did you do there?

A: I worked in the garden department.

Q: Is that where you got your start in landscaping?

A: I guess so. I worked there until one of our customers hired me away to work for his landscaping company.

Q: What was the name of that company?

A: A Cut Above.

Q: Tell us about A Cut Above.

A: It was a professional landscaping company. It was a fairly big operation with about 25 different employees. We worked all around Alastor City on the nicest yards. One of their clients was the Alastor family. I got to know Charlie and connected with him. He really was the greatest guy. When he started Second Chances, he asked if I would work with him and I jumped at the opportunity. I couldn't have made a better choice.

Q: Why do you say that?

A: Second Chances is like a family. We look out for each other. They really helped us out when we went through the ordeal with Etta. They brought

food. They sat with us. They took my parents food.

Q: By the way, where did you go to high school?

A: Bunker Hill High.

Q: Are you married?

A: I am. My wife's name is Louise. She is sitting right behind me today.

Q: Was she with you with regard to all that you described today?

A: She was. Right by my side. That is the only way I've been able to survive it.

Q: How have you dealt with this loss?

A: As well as I could.

Q: What have you done?

A: Louise and I gave ourselves permission to mourn. We talk about Etta. We don't pretend she didn't exist. We make certain to address Simon's feelings about her. During the first year, we had to be mindful of all the firsts without her—Mother's Day, Father's Day, her birthday, Christmas—they all triggered grief. And we weren't always prepared for how emotional we got about it. We couldn't move when one of those

times came. You know, your kids are supposed to bury you. You're not supposed to bury your kids.

Q: Let's turn to what happened in October of 2015.

A: Okay.

Q: Tell us about that.

A: Okay. My aunt talked to my mother and was very upset.

Q: What do you mean?

A: Madeline told mom that some of the doctors had made a fortune over something they took from Etta. I told my mother that she must have misunderstood. They had not gotten our permission to do anything but treat our baby. And Dr. Straus told us that the cells taken from Etta had been destroyed. So I could not imagine what she was talking about.

Q: What did you discover?

A: At the time, not much. There was an story about two doctors from the hospital, who received some award.

Q: What did you do next?

A: Fired up Louise's computer and looked on the Internet.

Q: Is this what you found?

A: Yes.

Q: Please explain what it is.

A: It has Exhibit X on it. And the title is Pure Genius.

Q: Did you know these doctors?

A: No. I didn’t know them. But I knew who they were talking about.

Q: So what did you do?

A: Louise and I called Dr. Straus.

Q: Both of you called?

A: Yeah. We were on speaker.

Q: What happened?

A: He told me that it was hospital policy to destroy the stem cells but he would check on it and get back to us.

Q: Did he get back to you?

A: He left a message and we called him back on speaker phone again. He told us that the lawyers told him he really should not discuss the situation. I didn’t understand. A couple days later, I got a letter from

some lawyer.

Q: How did that make you feel?

A: Really upset.

Q: Why?

A: Because I felt like they lied to me.

Q: What did the letter say?

A: That the hospital had not destroyed Etta's cells as Dr. Straus told me and Louise that they had been used for research. The letter said the doctors had decided the cells should be used to help others.

Q: And how did that make you feel?

A: Betrayed.

Q: What did you do next?

A: Talked to Kelly Shepherd, who put me in touch with a lawyer.

Q: You and Louise have sued these doctors, right?

A: We have.

Q: Why?

A: Because they had no right to do what they did.

Q: What do you mean?

A: Etta was our child. Not theirs. We were specifically told that the cells that had been removed from her body for her benefit would be destroyed after her death. Instead, these two doctors used a part of my child to line their pockets. That's wrong.

Q: You have not brought a claim for negligence have you?

A: No. Everything that was done was intentional, and they accomplished what they set out to do.

Q: And you do not contend that there was any problem with what was done with the initial surgery, right?

A: Right.

Q: So you contend that the problem is with the second surgery?

A: What was done following the second surgery with Etta's tissue.

Q: Okay. What was that?

A: That her tissue was used for something other than what we had consented to.

Q: But you understand that these doctors did not harm your daughter in any

way?

A: I don't agree. They exploited her.

Q: But they didn't kill her, did they?

A: No.

Q: And they used the stem cells you wanted destroyed to help others, right?

A: But they lined their pockets in the process.

Q: What are you asking the jury to do?

A: What's fair.

Q: What do you believe is fair?

A: I'm not certain. It is hard for me to take the emotion out of it. Etta was our baby.

Q: One last thing. Tell me about the bill you received from the hospital.

A: Okay. We got a couple.

Q: Tell me about them, please.

A: The first bill was separate. We talked to the hospital and had them run two. The first one is not a part of all this.

Q: Okay. So are you telling us that the bill shown as Exhibit V only covers

from the second surgery on?

A: Yes.

Q: Okay. Tell us about Exhibit V.

A: I think all totaled the bill was over half a million dollars. We had to pay a deductible, which was about $2,500 dollars. But by the time I got to it, Kelly Shepherd had paid it. I tried to write him a check but he wouldn't take it. The insurance paid the rest.

No other questions. Pass the witness.

EXAMINATION BY MS. DIAZ:

Q: How did finding out about the doctors' actions affect you?

A: It devastated me.

Q: And Louise?

A: And Louise.

Q: How so?

A: I couldn't sleep. I couldn't eat. I missed work. It made me relive the entire ordeal with Etta and Lauren. It was horrible. And it affected Louise

in the same way. We had to go see some of the therapists at Second Chances to deal with the pain.

Q: Had you seen the therapists at Second Chances before?

A: We had. Immediately after the accident for more than a year. But things had gotten better until this happened. Then, we both regressed. It completely disrupted our daily routine.

Q: And is it your testimony that this went beyond mere anger?

A: Oh, definitely. We both felt what we had when the accident occurred.

Thank you. I'll reserve the remainder of my questions for trial.

END OF DEPOSITION

DEPOSITION OF LOUISE KEATING
January 5, 2017

EXAMINATION BY MS. CHENG:

Q: What is your name?

A: Louise Keating.

Q: Before we go any further, you were present during your husband's deposition today, weren't you?

A: Yes.

Q: And the events he described, you experienced as well, didn't you?

A: I did.

Q: And was there anything he said that you remember differently or disagree with?

A: No. I generally agree with what he said.

Q: Okay. Let's start with the basics. How old are you?

A: 36.

Q: Where do you live?

A: Bunker Hill.

Q: Where did you grow up?

A: A suburb of Minneapolis.

Q: What's it called?

A: Robbinsdale.

Q: Did you go to high school there?

A: I did. A school called the St. Paul's School. It is a small Catholic school.

Q: Did you go to college?

A: I did.

Q: Where?

A: Alastor City University.

Q: Did you graduate?

A: No.

Q: What did you study?

A: Elementary Education.

Q: So you wanted to be a teacher?

A: At one point.

Q: How far did you get?

A: I made it through five semesters. I needed to complete eight to finish.

Q: So why did you stop?

A: I was burned out. I had to work so much to pay for school and I just couldn't do it all. It became easier to just work. I started thinking I would sit out one semester. Then I got married. Then I had kids. Before I knew it, it had been 16 years. I guess that is why they tell you to just stick it out.

Q: Do you work now?

A: I'm a waitress.

Q: Where do you work?

A: At a restaurant called Celebrations. A brother of the guy who hired Louis opened this restaurant in Alastor City a couple years ago. He was originally from Alastor City but had moved away after his parents died. He ran a restaurant called Celebrations in Colorado. When his brother was in a horrible accident and was in a coma for a long time, he and his kid moved back to town. He eventually opened a Celebrations restaurant here. I went to work for him.

Q: What do you do at Celebrations?

A: I'm a waitress. I work lunch shifts three days a week and dinner shifts

three days a week.

Q: Do you make good money?

A: I guess.

Q: How much do you make?

A: Anywhere from 400 to 600 dollars a week. My schedule is somewhat flexible so if I need to do something, I can.

Q: Tell me about your family.

A: Okay. I'm married to Louis and we have one son, Simon.

Q: But you've had other children?

A: We have. We lost our daughter, Etta, in 2013. And we lost our first child in 2001 during childbirth.

Q: Was your first child a boy or girl?

A: A little boy. Brandon.

Q: Let's talk about Etta.

A: Okay.

Q: What was her full name?

A: Henrietta Louise Keating.

Q: And when was she born?

A: St. Patrick's Day in 2009.

Q: Was she sick as a child?

A: Not that we noticed.

Q: Your husband said the doctors diagnosed Etta with early stages of muscular dystrophy. Did you ever see any signs of that?

A: Not that we noticed. You don't look for anything like that. She had all the normal pediatric checkups. And they were all clear. Sure, she was clumsy and at times had trouble running. But she was little and she was always such a happy baby. She hit all the normal milestones for walking, talking, and all the other things babies do. So, no, we didn't notice.

Q: Tell us what you remember about the day of the accident.

A: I had errands to run before work. I needed to renew my driver's license. I needed to pick up something for Simon's birthday, which was the following week. So I asked Lauren to get to the apartment early so Louis and I could leave before eight. She had gone out to dinner with friends the night before so she seemed a little sleepy when she got to the

apartment. The kids were excited to see her, as always. She always clowned around with them. Etta asked Lauren if they could go see the bears, which was something both of them loved to do. So Lauren asked if it was okay for them to go to the zoo. I said, of course. Then, I kissed Etta on the head and ran out the door to run my errands.

Q: When did you hear about the accident?

A: Just as the lunch shift started. I had three tables. Campbell Alastor came up to me and pulled me outside the restaurant. He told me that there had been an accident with Lauren and Etta. My heart sank. He brought me to the hospital and, as we were walking in, I saw Louis and Kelly Shepherd in the parking lot. We walked in together.

Q: Before you go on, who is Campbell Alastor?

A: My boss. Campbell owns Celebrations. His brother was Charlie Alastor, who hired Louis at Second Chances. They have helped us so much.

Q: Okay. What happened once you were in the hospital?

A: I think Campbell or Kelly talked to the one of the nurses because just a minute or two later, Dr. Straus pulled us into a little room to tell us what

had happened.

Q: What did he tell you?

A: He told us there had been a terrible accident and Lauren had died at the scene. I couldn't believe it. She was so kind. My sidekick for my entire life.

Q: What did he tell you about Etta?

A: His words were touch and go.

Q: What did that mean?

A: That she was in really bad shape but they were trying to save her.

Q: What happened next?

A: We waited and waited and waited. Some friends came by and brought us things. Our minister came to talk to us. My parents flew in from Wisconsin, where they lived. But I was not going to leave that place without my baby.

Q: Tell us about the surgeries.

A: Okay. There were two that I know of. The first was on Tuesday but there wasn't much they could do. They tried to stop the bleeding so she could

heal but the swelling was bad. The second surgery was to take out her spleen and to remove some cells.

Q: Why the cells?

A: It was to get some of Etta's cells so they could treat them and then put them back in her so she would get better.

Q: And you agreed to let them do this?

A: Of course, we did. Anything that was going to make Etta better.

Q: How did she do during the surgery?

A: That's hard to say. The doctor didn't really tell us much. And Etta had been unconscious ever since the accident. No one ever told us there had been any problems. We were just told every few hours that she was very weak. We started having scares about losing her on Friday because she was so weak.

Q: Could you see her?

A: For short periods of time. She was in the ICU and they were really keeping people out of there. But Louis and I could go in there when we wanted but so many people had congregated to comfort us that we spent a

lot of time outside of ICU. In retrospect, I should have stayed at Etta's side every moment. But you don't think about how little time you have until it's gone.

Q: Did you ever leave the hospital?

A: No. The hospital has a hotel attached to it. Louis' boss paid for us to have a room there. After a couple days, I walked over and cleaned up each day. My mom had come in and told me that I needed to freshen up so I did. But other than that, I stayed in the waiting room by the ICU.

Q: How was that time?

A: Miserable. I had lost my sister. My baby was so very sick. There was very little I could do except be there.

Q: When was the service for your sister?

A: The Saturday after Etta died. We had a joint service for the two of them. It was at the Chapel in the Park. It was a beautiful day except for the fact I had to bury my sister and my baby.

Q: Let me return for a minute to the day that Etta died. Tell me how you found out.

A: Dr. Straus told us. It happened really late in the evening. We had been sitting in the waiting room. He walked in and I immediately knew something was wrong. He said that he was sorry but they had done all they could for our baby. I had dreaded that moment ever since we got to the hospital.

Q: Did he tell you about Etta's cells during that conversation?

A: No. He took us back to see her one last time. While we were in the ICU room with all the machines around us, Louis asked about the second surgery and what would happen to the cells that were taken to help her. Dr. Straus said those cells would be destroyed. And Louis said good, thank you.

Q: What did you do next?

A: We hugged each other. Talked to our parents, our friends. Talked to our minister. Tried to help Simon understand what was happening. And we planned a memorial service.

Q: Let's switch gears for a minute and talk about how you discovered what had happened to Etta's cells.

A: Okay.

Q: When did you learn of this?

A: It must have been in October of 2015. It was before Halloween because we had many discussions about what Simon would wear. He ended up dressing as a Star Wars character. But that was happening when my mother-in-law called us.

Q: What did she say?

A: That two doctors got an award and talked about Etta's surgery. I asked why would they do that. She said that they had apparently taken the cells and used them in some research.

Q: How did that make you feel?

A: I couldn't believe it. I felt so violated.

Q: Why?

A: Because we had been lied to. Dr. Straus told us that the cells were going to be destroyed because they couldn't be used to help Etta. And then he told us before we left the hospital that it had been done—the cells had been destroyed.

Q: What did you do?

A: Louis and I talked. We got online and looked up information about the doctors. We found an article talking about how great they were and all this good stuff they were doing, which shows you that you cannot believe all you read.

Q: Did you talk to Dr. Straus about it?

A: Once. But he didn't know anything. He called back and left a message. We called him back on his cell phone. This time, he told us the stem cells had been used by these doctors and that the hospital's lawyer wouldn't let him talk to us any more about it.

Q: What did you do?

A: We talked to a lawyer ourselves and this fight began.

Q: Are you back at work?

A: I am.

Q: And is Louis back at work?

A: Yes.

Q: Tell us about the hospital bills you're seeking to recover in this lawsuit.

A: They totaled 540,153 dollars.

Q: Okay. What does that represent?

A: What the hospital charged us for the second surgery and the treatment afterwards.

Q: That is a lot of money.

A: Yeah. Do you believe how much they charge? It is crazy. I guess they inflate everything so much. Etta was in critical condition and they were doing all kinds of things to her. I figured it would be expensive but those numbers are outrageous. And what seems even more outrageous is when they being asked to pay damages they claim they shouldn't have to pay what they charged us.

Q: What do you mean?

A: Well, first they say they're not liable. When they're found liable, they say they shouldn't not have to pay anything. Then, they say we should not be able to make them pay what they charged us. They want a discount. Are they going to give us money for what we paid for insurance? I seriously doubt it. But they want to act like they paid that bill so they can chisel us

out of money. Typical hospitals.

Q: You're not seeking payment for the bills related to the first surgery?

A: No, we're not.

Q: Why not?

A: Because we're not complaining about what happened in the first surgery.

Q: And those bills have been paid?

A: They have been.

Q: Did you pay them?

A: No. Louis' boss paid the deductible portion and our insurance paid the rest.

I have no other questions. Pass the witness.

EXAMINATION BY MS. DIAZ:

Q: Why are you suing?

A: They are profiting from Etta and her suffering. How should I feel? They never asked for our permission. If it is truly our choice, don't we have a right to decide? Can they decide for us? And don't they have to tell us

what's going on so we can make a decision? They never asked us. Ever.

Q: Would you have given consent?

A: I doubt it. Certainly not to make those millionaires. They're ready to help others but only if they make millions.

Q: What do you want?

A: I want my baby back.

Q: From this suit, I mean?

A: For the jury to do what's fair.

Q: Okay. How do we measure what's fair?

A: That's up to the court and the jury. I cannot live with all this money these vultures have made by stealing something from me and my family.

Q: You heard Louis' testimony about how it made you feel, didn't you?

A: I did.

Q: Did you go through the same things?

A: Most definitely.

Thank you. Nothing further.

END OF DEPOSITION

DEPOSITION OF WALTER WALLACE
January 9, 2017

EXAMINATION BY MS. DIAZ:

Q: Please state your name for the record.

A: Walter Wallace.

Q: And you are a doctor, right?

A: I am.

Q: How old are you?

A: 37.

Q: Where do you live?

A: In Alastor City.

Q: What part?

A: Near downtown. In a neighborhood called Oak Hollow.

Q: What do you do?

A: I am a physician, teacher and researcher.

Q: Do you work in Alastor City?

A: I do.

Q: Where?

A: At the Center for Innovative Medicine at Alastor City University

Hospital.

Q: Is that also where you teach?

A: It is. The university has a medical school and the hospital is attached to it.

Q: And is this also where you do research?

A: It is.

Q: How long have you worked there?

A: Ten years.

Q: Where did you grow up?

A: Many places. But primarily on the East Coast.

Q: What part?

A: Rhode Island, Vermont and Massachusetts.

Q: Where did you go to high school?

A: Franklin Senior High.

Q: And where is that?

A: Franklin, Massachusetts.

Q: Where did you go to college?

A: NYU.

Q: And what was your degree in?

A: Statistics.

Q: And then you went to medical school?

A: Yes.

Q: Where?

A: At Johns Hopkins in Baltimore.

Q: Did you do a residency?

A: Yes. I did a residency in neurology at the Cleveland Clinic.

Q: Did you move to South Texas after finishing your residency?

A: Yes.

Q: And you became affiliated with Alastor City University and its hospital?

A: Yes.

Q: And you have worked there ever since?

A: Yes.

Q: Do you teach at the medical school?

A: I do. I'm a tenured professor.

Q: And you do research?

A: Yes.

Q: Talk to me about your research.

A: I study uses for stem cells.

Q: And you work on a research team?

A: I guess. It is just me and Dr. Zoe Brockette, who is sitting beside me today. We have been working together for seven years on our stem cell research.

Q: Okay. What are stem cells?

A: Stem cells are the body's raw materials. A stem cell is a type of cell that, under the right conditions, divides to form more stem cells as well as specialized cells with a more specific function. The newly created cells are called daughter cells. These daughter cells either become new stem cells or become specialized cells with a more specific function, such as blood cells, brain cells, heart muscle or bone. No other cell in the body has the natural ability to generate new cell types.

Q: Why are you studying excised stem cells?

A: Demand is increasing because of the realization of personalized

medicine, which relies on excised human tissue to develop innovative tests for application in patient care. Neurological disorders, such as muscular dystrophy, cerebral palsy, and injury to the brain and spine currently have no known definitive treatments or cures. Neurons in the brain and spinal cord don't regenerate. Stem cells do. They can be used to form new tissues and promote repair and regeneration.

Q: What specific treatment have you studied?

A: Autologous bone marrow stem cell therapy for neurological disorders.

Q: What is that?

A: Most stem cells are in your bone marrow. You also have some in your blood that circulate from your bone marrow. Bone marrow stem cells turn into red blood cells, white blood cells, or platelets to help your body stay healthy. If your bone marrow is attacked by a disease, it can no longer make normal blood cells. In a stem cell transplant, healthy stem cells are placed in your body through an IV to help your bone marrow start to work right. When the stem cells come from your own blood or bone marrow, it is called an autologous transplant.

Q: You are speaking in general terms, what is your specific research?

A: We do many things. But lately, our research has focused on uses for autologous cells, primarily in adults. But recently that has expanded to uses for autologous cells in children.

Q: Let's talk about your involvement with Etta Keating.

A: Okay.

Q: When did you first come into contact with her?

A: In early April when I was called in for a neurological consult.

Q: Who called for the consult?

A: Dr. Scott Straus.

Q: Okay. What did you encounter?

A: A four-year old girl with very serious injuries from an automobile accident.

Q: What were you told about the car accident?

A: Not much. Only that is was a car accident. And the accident involved the same type of car that Zoe drove. But Zoe's was a newer model.

Q: You're referring to Dr. Brockette?

A: I am.

Q: Okay. What did you do?

A: Well, the first thing I did was bring Dr. Brockette to participate as well.

Q: Okay. Then what?

A: We participated in an initial surgery to assess the damage, control bleeding and attempt to get swelling under control. Dr. Straus determined it was too risky to continue with any further surgery on that day because she was in such bad shape. But we convinced him to use autologous stem cell therapy using bone marrow mononuclear cells.

Q: What is stem cell therapy and how does it work?

A: Stem cell therapy, also known as regenerative medicine, promotes the reparative response of diseased, dysfunctional or injured tissue using stem cells or their derivatives. It is the next chapter of organ transplantation and uses cells instead of donor organs, which are limited in supply. Researchers grow stem cells in a lab. These stem cells are manipulated to specialize into specific types of cells, such as heart muscle cells, blood cells or nerve cells. The specialized cells can then be

implanted into a person. For example, if the person has heart disease, the cells could be injected into the heart muscle. The healthy transplanted heart cells could then contribute to repairing defective heart muscle. Researchers have already shown that adult bone marrow cells guided to become heart-like cells can repair heart tissue in people, and more research is ongoing.

Q: And the stem cell removal happened during the second surgery?

A: It did.

Q: What else happened during that surgery?

A: Dr. Straus removed her badly damaged spleen.

Q: Was that surgery considered an emergency procedure?

A: Not, it wasn’t.

Q: So consent had to be obtained for the procedure, right?

A: Of course.

Q: Who obtained that?

A: Dr. Straus was the treating physician. He did.

Q: Okay. So you extracted her stem cells so you could use them to treat her

later?

A: Yes.

Q: But you didn’t get the opportunity to reintroduce those stem cells back into Etta’s body?

A: No, we didn’t. She passed away before we could do so.

Q: So what did you do with the stem cells?

A: By then, they were cell lines that were generating other cells. We used them in our research.

Q: What are stem cell lines?

A: A stem cell line is a group of cells that all descend from a single original stem cell and is grown in a lab. Cells in a stem cell line keep growing but don't differentiate into specialized cells. Ideally, they remain free of genetic defects and continue to create more stem cells. Clusters of cells can be taken from a stem cell line and frozen for storage or shared with other researchers.

Q: You didn’t destroy the stem cells?

A: No, we didn’t.

Q: Why not?

A: We discovered that the patient had immortal cells.

Q: What are immortal cells?

A: One that can be cultured in the lab. They grow indefinitely.

Q: Okay. From the cell lines, you developed helolirsen, right?

A: Yes.

Q: What is so significant about helolirsen?

A: Our research has shown that helolirsen is a safe and effective treatment for muscular dystrophy, cerebral palsy, spinal injury, and other incurable neurological disorders. We use it with autological stem-cell therapy. Helolirsen is used to treat and condition the removed stem cells once they're removed from the patient, which makes them into super stem cells that last longer and fight disease better. The findings, which appear this month in the journal Popular Neurology, have paved the way for broadspread dissemination of helolirsen. Patients with these incurable neurological disorders have limited treatment options and a desperate need for effective therapies.

Q: How could helolirsen help?

A: Our clinical trials show that helolirsen could provide an important treatment for delaying the progression of the disease. They have shown that daily use of helolirsen can increase muscle mass and slow muscle degeneration in patients, prolonging their ability to walk and preserving respiratory function in muscular dystrophy patients. There is every indication that the same will be true for cerebral palsy and spinal injury patients.

Q: I thought you said that helolirsen is used as part of the autological stem cell therapy?

A: It is.

Q: But now you're talking about uses for helolirsen outside of that therapy?

A: Yes.

Q: We've discovered that it, in concentrated form, it can be used to help in the therapy but it can also be used intramuscularly on a daily basis.

Q: You obtained a patent for helolirsen?

A: We did.

Q: Who owns the patent?

A: Initially, Dr. Brockette and I owned it in equal shares. But we each assigned a one-third share of our half to the university, which is what our employment agreement requires.

Q: So who owns the royalty rights now?

A: One-third me. One-third Dr. Brockette. One-third Alastor City University.

Q: And when was the patent issued?

A: Late 2014.

Q: You sold the rights to helolirsen to Bell Pharmaceuticals?

A: We licensed it.

Q: How much did they pay you?

A: A fee up front and then monthly payments to continue our research and a royalty off of any proceeds of helolirsen.

Q: What was the up front payment?

A: 1.5 million.

Q: And you divided that equally between you, Dr. Brockette, and the

university?

A: Yes.

Q: What's the monthly payment you get?

A: 350,000.

Q: And that is split equally between the three of you as well?

A: It is.

Q: And when did those payments start?

A: The first of May, just after we reached an agreement with Bell Pharmaceuticals.

Q: And that is for your continued research?

A: It is.

Q: What is the company doing to promote helolirsen?

A: Bell Pharmaceuticals began a push to gain FDA approval for the drug immediately after closing the deal with us. Our initial clinical study, which involved 196 patients, showed that helolirsen was safe, effectively preserved muscle strength, and was associated with less side effects than other drugs. The data from the study is the foundation for our New Drug

Application currently pending before the FDA for use of the drug to treat neurological disorders.

Q: Have you expanded those clinical studies?

A: Yes, as part of the process to obtain FDA approval.

Q: Are you optimistic?

A: We are. Bell Pharmaceuticals got a breakthrough therapy designation for helolirsen.

Q: What does that mean?

A: Breakthrough therapy is a FDA designation that expedites drug development. The designation allows the FDA to grant priority review to drug candidates if preliminary clinical trials indicate that the therapy may offer substantial treatment advantages over existing options for patients with serious or life-threatening diseases. A breakthrough therapy designation can be assigned to a drug if it as a drug which is intended alone or in combination with one or more other drugs to treat a serious or life threatening disease or condition and if the preliminary clinical evidence indicates that the drug may demonstrate substantial

improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. Drugs that have been granted breakthrough status are given priority review. The FDA will work with the sponsor of the drug application to expedite the approval process. This can include rolling reviews, smaller clinical trials, and alternative trial designs.

Q: The cells taken from Etta were taken as diagnostic tissue?

A: In part, they were.

Q: What is diagnostic tissue?

A: Diagnostic tissue is all tissue obtained during a medical procedure for patient care that is sent for documentation of what was excised. But that does not mean that it cannot also be used for research purposes.

Q: To be clear, your research that ultimately produced helolirsen started with Etta's cells, did it not?

A: That's correct.

Q: You couldn't have done it without Etta's cells?

A: We maybe could have done it without her cells. But because we used her

cells, we didn't.

Q: And your discovery of hololirsen was the direct result of your using Etta's stem cells for research purposes, was it not?

A: That's correct.

Q: Despite this, you don't believe that Etta's parents have any claim to the proceeds of what Etta's cells generated?

A: No. I don't. Courts have already determined that excised tissue or cells are not the property of the person from whom they are removed. I appreciate the role a donor plays in the process but we're using excised tissue and cells to attempt to help others. And you cannot obtain a patent for something that naturally occurs. A patent must be the product of human ingenuity. That is my work. And the work of my colleague, Dr. Brockette.

No other questions. Pass the witness.

EXAMINATION BY MS. CHENG:

Q: A couple of questions. Your failure to destroy the stem cells taken from

the patient did not kill her, did it?

A: No.

Q: It did not even contribute to her demise, did it?

A: No, it didn't.

Q: And that tissue was put to good use, wasn't it?

A: Yes. The discoveries we have made are helping many people.

Q: And they were simply going to throw the tissue away?

A: Essentially.

Q: I have a random question. You got all this money and you still drive a 2005 Ford F-100 pickup. Why?

A: My parents bought it for me when I was in medical school, and I still have it. It gets me where I need to go.

I have nothing further. I'll reserve my remaining questions for trial.

END OF DEPOSITION

DEPOSITION OF ZOE BROCKETTE
January 22, 2017

EXAMINATION BY MS. DIAZ:

Q: Could you state your name?

A: Yes, I could.

Q: Please do so.

A: Zoe Brockette.

Q: Are you a doctor?

A: I am.

Q: And may I call you Dr. Brockette?

A: You may.

Q: And how old are you?

A: 37.

Q: Could we talk a little while about your job and educational background?

A: We could.

Q: Okay. What do you do?

A: I work at the Center for Innovative Medicine.

Q: And where is that?

A: At the hospital.

Q: Which hospital?

A: Alastor City University Hospital.

Q: Are you a neurologist?

A: I am.

Q: And you practice in that area?

A: I do.

Q: Is that your specialty?

A: It is.

Q: Could you please explain to the jury what a neurologist does?

A: I could.

Q: Please explain what a neurologist does.

A: A neurologist is a doctor with specialized training in diagnosing and treating diseases of the brain, spinal cord, peripheral nerves, and muscles.

Q: What neurological disorders do you typically treat?

A: Muscular dystrophy, cerebral palsy, and spinal-cord injuries are some examples. Each arises from dysfunction of the nervous and musculoskeletal system that leads to impaired movement and abnormal

muscle tone, delayed milestones, headaches, seizures, and lack of coordination.

Q: Let's talk about your medical training. Can you take us through your time in medical school through any post-graduate training you have had?

A: I could.

Q: Please do so.

A: I graduated from the University of Michigan Medical School in 2004. Then I completed a one year general surgery internship—that is a year of clinical rotations specific to surgery and its subspecialties. Then I went on to complete a 3-year residency in neurology. I completed both my internship and residency at Johns Hopkins Hospital in Baltimore. While a resident, I completed a mini-fellowship in pediatrics at Children's Hospital of the King's Daughters in Norfolk, Virginia. I further specialized in emergency medicine as well.

Q: After that training, did you move to South Texas?

A: I did.

Q: Did you then become affiliated with Alastor City University Hospital?

A: I did.

Q: And did you start working with Dr. Wallace when you became affiliated with the hospital?

A: I did.

Q: And when you describe the research you've done, has the research been done along with Dr. Wallace?

A: It has.

Q: So could he speak to the research as well?

A: He could.

Q: Do you have any certifications?

A: I do.

Q: Could you tell us what those are?

A: I could.

Q: What are they?

A: I am double board certified in neurology and emergency medicine.

Q: Could you please explain your research?

A: I could.

Q: Please do so.

A: Dr. Wallace and I work in the Center for Innovative Medicine and focus our research on the development of new approaches for treating neurological diseases, primarily using cell and gene therapy. In addition, stem cell isolation and genomics analysis, as well as advanced imaging and transplant strategies are also pursued, both for biological assessment and therapeutic modeling. Our disease targets are those attributable to dysfunction or loss of single cell types; for instance, demyelinating disease is studied as a potential target for oligodendrocyte progenitor cell delivery, while Huntington's Disease is studied as a potential beneficiary of medium spiny neuronal replacement from endogenous stem cells. Conversely, gliomas and gliomagenesis are studied from the standpoint of dysregulated signaling by endogenous glial progenitors. We have conducted studies on neural stem and glial progenitor biology, and on astrocytic physiology and pathology, as well as on cerebral blood flow and its glial regulation.

Q: Okay. Lots of big words. Help us understand.

A: I cannot make you understand. I can only explain it to you.

Q: Try to help me by explaining what the emphasis of your research is.

A: The emphasis of our research is on using new drugs and technologies to mobilize endogenous stem and progenitor cells of the adult brain and spinal cord as a means of structural repair.

Q: What drew you into research?

A: I was just being curious as a kid. I liked to solve problems and figure out how things work. I had a chemistry set in the garage and my father supported my interests. I was inspired by good teachers and I was lucky enough to be in a program during my junior year of high school. There, I got to do an experiment. It was kind of a silly thing—identifying how much iron a particular strain of yeast needed to grow optimally. But it hooked me on science and lab work.

Q: Okay. Let’s shift gears to your interaction with Etta. When did you first encounter her?

A: April 2, 2013.

Q: Tell us the circumstances that led to your involvement.

A: A young child was brought to the hospital in traumatic distress. She had been involved in a car accident. The pediatrician who treated her called for a neurological consult and Dr. Wallace responded. He then called me and asked me to join him. I evaluated the patient along with Dr. Wallace to determine the best course of treatment.

Q: What did the two of you recommend?

A: Autologous stem-cell therapy.

Q: Okay. Please explain what stem cells are.

A: Stem cells are the basic building blocks of human tissue and have the ability to repair, rebuild, and rejuvenate tissues in the body. When a disease or injury strikes, stem cells respond to specific signals and set about to facilitate the healing process by differentiating into specialized cells required for the body's repair.

Q: And what does stem cell therapy do?

A: Stem-cell therapy helps the body heal. We tap into our body's stem cell reserve daily to repair and replace damaged or diseased tissue. When the body's reserve is limited and as it becomes depleted, the regenerative

power of our body decreases and we succumb to disease and injury.

Q: How does it work?

A: An important concern in the treatment of neurological diseases is that the neurons in the brain and spinal cord are unable to instinctively regenerate. Stem cells have a unique capacity of self-renewal and differentiation into different types of mature cells. Some stem cells are believed to possess the property of transdifferentiation wherein they can differentiate one cell type to another within the same tissue or develop into a completely different tissue without acquiring an intermediate undifferentiated progenitor state. They are instrumental in the formation of new tissues and thereby promote repair and regeneration. They are obtained from various sources such as pre-implantation embryos, cord blood, bone marrow, and fat tissue.

Q: What does autologous mean?

A: Autologous cell therapy refers to infusion or transfer of human tissue or cells back to the same person for treating a diseased part. For the same purpose, stem cells are removed from the patient, harvested, cultured, and

once again transplanted to the same person.

Q: What is the benefit of autologous cell therapy?

A: This method reduces the chances of rejection to the treatment by the body. Autologous cell therapy does not even require immunosuppression.

Q: Describe the procedure.

A: Stem cells are taken directly from the bone marrow cavity in the hip bones.

Q: And this was the surgery performed on Etta on April 4, 2013.

A: It was.

Q: And you were there?

A: I was.

Q: What other doctors participated in the surgery?

A: Dr. Wallace and Dr. Straus.

Q: How long did the surgery last?

A: 90 minutes.

Q: What else happened during that second surgery?

A: A splenectomy.

Q: Who performed it?

A: Dr. Straus.

Q: During that surgery, did you remove more stem cells than were necessary for the cell therapy?

A: We did.

Q: Did the removal of the additional stem cells increase the risk to Etta?

A: It did not.

Q: Why were additional stem cells removed?

A: We removed additional stem cells so that they could be used for research.

Q: When you say for research, you're talking about the research you and Dr. Wallace were conducting, aren't you?

A: I am.

Q: And you did not disclose that fact to Etta's parents?

A: I did not.

Q: Why not?

A: I was not the primary physician. Dr. Wallace and I were called in to assist Dr. Straus. He had the relationship with the patient and her parents.

Q: So to be clear, did you and Dr. Wallace enter that surgery with plans to remove more stem cells than were needed for the autologous cell treatment?

A: We did.

Q: Did you and Dr. Wallace discuss the quantity of stem cells to remove before you took them?

A: We did.

Q: And you see nothing wrong with what you did?

A: I do not.

Q: Why not?

A: We had general consent to remove the stem cells. We took what was necessary for the patient's treatment. We also took stem cells that were to be used to help the patient and others suffering from insurable neurological disorders like she had.

Q: What neurological disorder did Etta have?

A: Early onset muscular dystrophy.

Q: How was that discovered?

A: Dr. Straus ordered a creatine kinase test and the results showed grossly-elevated levels.

Q: What is a creatine kinase test?

A: The test measures phosphocreatine kinase levels by taking a blood sample and separating it into fractions that contain cells and a fraction that does not–the serum. The amount of phoshocreatine kinase in the serum is reported in units of enzyme activity per liter of serum.

Q: What is a normal range?

A: Normal varies based on age, gender, race, and activity.

Q: Generally, what is normal though?

A: A healthy adult should have reported levels somewhere between 22 and 200 units per liter.

Q: Would the range be similar for children?

A: It would.

Q: What was Etta's reading?

A: 3440.

Q: Is Exhibit W what you saw?

A: It is.

Q: Okay. What is the process to reintroduce the stem cells back into Etta's body?

A: A central venous catheter is inserted in the patient's chest. The stem cells travel from a blood bag through the catheter into the patient's blood, and to the bone marrow, where they will begin to produce new cells in one to three weeks.

Q: But this process was never performed on Etta?

A: It was not.

Q: Because she died?

A: That is correct.

Q: You developed a new drug from the cells taken from Etta's stem cells?

A: No, not directly.

Q: What was the new drug developed from?

A: Helolirsen was developed from the cell line Dr. Wallace and I created in our laboratory.

Q: But the cell line was created from the stem cells taken from Etta's body?

A: It was.

Q: And you obtained a patent based on that cell line?

A: We did.

Q: And you personally received 1.4 million dollars by the end of 2016 based on that cell line, hadn't you?

A: I had.

Q: And Dr. Wallace received a similar amount based on that cell line, didn't he?

A: He did.

Q: And Alastor City University did as well, didn't it?

A: It did.

Q: And all three of you will continue to receive money based on the cell line, won't you?

A: We have a royalty on the patent that will continue to generate income for each of us.

Q: When did you learn that Etta's parents had a problem?

A: On April 2, 2013.

Q: You knew at the outset they had a problem?

A: Yes. Their daughter had been in an accident.

Q: No. I'm talking about when did you learn that Etta's parents had a problem with what you had done?

A: I do not remember the exact date but it was when a lawyer from the university general counsel's office came to our laboratory and told us of a telephone call by the plaintiffs to Dr. Straus.

Q: You never had any communication with the plaintiffs?

A: I had not.

Q: Did Dr. Wallace have any contact with them?

A: He had not.

Q: How do you know that?

A: Dr. Wallace told me he had not communicated with the plaintiffs.

Q: Before we finish, please tell us where you grew up.

A: Boston, Massachusetts.

Q: Did you go to high school there?

A: I did.

DEPOSITION OF ZOE BROCKETTE
January 22, 2017

Q: What is the name of the high school you attended?

A: Boston Latin School.

Q: Do you live in Alastor City?

A: I do.

Q: What part?

A: Westpark.

Q: Are you married?

A: I am.

Q: What is your husband’s name?

A: William Brockette.

Q: Do you have any children?

A: We do.

Q: How many?

A: Two.

Q: What are their names?

A: Constance and Wesley.

Q: How old is Constance?

A: Four.

Q: How old is Wesley?

A: Two.

Q: How would you feel if someone took their cells without your permission?

A: I would not like it.

Q: So do you understand why Etta's parents are upset?

A: No, because that is not what happened in this case.

Q: Isn't it though?

A: No. It is not. We were called for a neurological consult on a child with an incurable neurological disorder. A surgery was scheduled to remove autologous bone-marrow derived mononuclear cells from her. We extracted what was needed for that treatment and took extra to study the cell tissue in the laboratory. It is my understanding that the plaintiffs are not complaining about the extraction. I have been told the complaint is that the cell tissue was not destroyed after the child died from the injuries she sustained in the car accident.

Q: Do you acknowledge that the harvesting and testing of Etta's cell tissue

was instrumental in your discovery of helolirsen?

A: I do.

Q: No further questions. Thank you Dr. Brockette.

EXAMINATION BY MS. CHENG:

Q: Dr. Brockette, I would like to clarify a couple points. Did the removal of the stem cells contribute in any way to the patient's death?

A: It did not.

Q: Have the plaintiffs alleged you or any of the doctors committed medical malpractice?

A: They have not.

Q: Is their complaint that you failed to destroy cells and used them for medical research instead?

A: It is.

Q: What was done with the cells?

A: The tissue was taken to the laboratory and a cell line was created.

Q: How was that accomplished?

A: The cells were isolated from the tissue and transferred to a fresh growth medium to provide more room for continued growth. Normal cells usually divide only a limited number of times before losing their ability to proliferate, making them of limited use or no use in medical research. The patient's cells here were naturally immortal, meaning that they did not die after a set number of cell divisions. These cell lines were and continue to be used for conducting a multitude of medical experiments on. Because of these cell lines, researchers like Dr. Wallace and myself do not have to test our drugs on actual human subjects. We are able to test them on these cell lines.

Q: Could you obtain a patent for the cells themselves?

A: No.

Q: Why not?

A: Patents are not available for parts of the human body.

No further questions.

END OF DEPOSITION

DEPOSITION OF ZOE BROCKETTE
January 22, 2017

DEPOSITION OF SCOTT STRAUS
January 23, 2017

EXAMINATION BY MS. CHENG:

Q: Please state your name.

A: Scott Straus.

Q: What do you do?

A: I am a physician.

Q: Where do you work?

A: Alastor City University Hospital.

Q: What are your duties?

A: Aside from my responsibilities as a treating physician, I am administratively responsible for the care provided by all the doctors in the general surgery discipline. There are 12 of us who practice in this area. I work with the hospital to develop new programs to better meet the needs of the patients.

Q: How long have you been in that position?

A: Since 2004.

Q: What is your educational background?

A: I went to Yale for college and medical school.

DEPOSITION OF SCOTT STRAUS
January 23, 2017

Q: After medical school, what did you do?

A: First, I had a one-year internship at Stanford University Hospital. Then, I had a residency at Ohio State University Hospital in general surgery.

Q: What did you do afterwards?

A: I came to University Hospital here in Alastor City.

Q: Have you worked there ever since?

A: Yes.

Q: When did you come into contact with Etta Keating?

A: When she was brought to Alastor City University Hospital on April 1, 2013.

Q: Did you examine her when she arrived?

A: I did. One of the emergency physicians called for a surgical consult. I was on duty that day and began treating her.

Q: What was her condition when you first saw her?

A: Really bad. The emergency room doctors had cleaned her up a bit but she was really in bad shape.

Q: Was she conscious?

A: No. She was comatose.

Q: What did you do for her?

A: We ran a series of diagnostic tests and treated her injuries the best we could. We also took measures to minimize the swelling and blood loss. We were really trying to keep her alive.

Q: Did you perform surgery immediately?

A: No. She would not have survived it. We addressed the wounds we could and tried to stabilize her.

Q: When did you perform surgery on her?

A: The first surgery was the following day.

Q: What was the purpose of that initial surgery?

A: To stop internal bleeding and assess what we needed to do to help her heal.

Q: So it was diagnostic and exploratory?

A: In part.

Q: What was the other part?

A: To address the swelling and damage from the accident.

Q: What had you understood to be the cause of the accident?

A: A woman ran a red light and plowed into the driver's side of the vehicle the child was riding in. The child was properly restrained but the other vehicle was a big Chevrolet Surburban and the Kia Soul the child was riding in was really no match for it. Her aunt was driving and was pronounced dead on the scene. Very tragic.

Q: What happened to the other driver?

A: She broke her arm and had bruises from the deployment of the air bag but otherwise walked away.

Q: Do you remember her name?

A: Ainsley Hayes. I remember because she came to the hospital so we could check her out. She totally freaked out when she found out a child was injured. Apparently, she lost a child in a custody dispute a few years ago. We calmed Ms. Hayes down and sent her home.

Q: Okay. That initial surgery happened on Tuesday, April 2nd, right?

A: That's correct.

Q: Was it successful?

A: Yes, in that we were able to stop some internal bleeding and address some swelling from the accident.

Q: What else did you discover?

A: Eventually that this child suffered from early onset muscular dystrophy.

Q: How did you do that?

A: With a CK test?

Q: What's CK?

A: Creatine Kinase.

Q: What did the test show?

A: A grossly elevated level of creatine kinase.

Q: What does that mean?

A: During the process of muscle degeneration, muscle cells break open and their contents find their way into the bloodstream. Because most of the CK in the body normally exists in the muscle, a rise in the amount of CK in the blood indicates that muscle damage has occurred or is occurring.

Q: Wasn't this test performed after the accident?

A: Yes.

Q: Well, she obviously had muscle damage from the accident. Wouldn't that account for the grossly elevated CK reading?

A: No. It would take hours or days for the reading to get that high. The result showed us that the problem was there before the accident.

Q: Please explain what the muscular dystrophy diagnosis would have meant for Etta.

A: She would have had muscle weakness, which could have progressed rapidly leading to significant disability. Many children with muscular dystrophy end up in a wheelchair by age 9 or 10 because of weakness in their legs. The symptoms eventually spread to other parts of the body, including the heart and muscles responsible for breathing, and the disease is often fatal by the time the individual reaches his late teens.

Q: Did you call in anyone to assist you with the treatment of Etta?

A: Yes. I called Dr. Wally Wallace for a neurology consult. He examined the child and then called in Dr. Zoe Brockette to help too. They observed the first surgery.

Q: Why?

A: Because the child's case related to the research the two of them were performing at the time.

Q: What did they do next?

A: Once we determined that she suffered from muscular dystrophy, they talked to me about autologous stem cell therapy as a possible treatment. It has been done in adults for some time but there are few incidents of treatments done with children. They have been doing some research related to this and thought Etta would be a good candidate for it.

Q: Did you agree?

A: I didn't disagree. And anything that could help this child was something I wanted to do. She was so fragile.

Q: Did you talk to the parents?

A: Yes.

Q: What did they say about it?

A: They were in the same place I was. Anything that could help this child was something they wanted to do. But they were really out of it.

Q: What do you mean?

A: Their baby was barely hanging on. And Mrs. Keating had lost her sister. They were really traumatized. I tried to comfort them as much as I could but the situation was dire.

Q: They agreed to the second surgery, right?

A: Yes. We were already taking out her spleen. They did it then.

Q: They signed a consent form?

A: Yes.

Q: Did you have them do so?

A: Not personally. But I instructed Margot Byer to get the paperwork done.

Q: Who is she?

A: A resident. I told her that I had explained the process to them but if they had any further questions to let me know.

Q: Did they have any further questions?

A: No.

Q: When did the second surgery take place?

A: Thursday afternoon.

Q: What day was that?

A: April 4th.

Q: How were the stem cells to be taken?

A: From the bone marrow.

Q: Who performed that part of the surgery?

A: Dr. Wallace and Dr. Brockette did together.

Q: Were you present?

A: I was.

Q: How long did this surgery take?

A: I lose track of time when I'm in surgery but it was more than an hour.

Q: Were there any complications?

A: No.

Q: Did you know going into the surgery that Dr. Wallace and Dr. Brockette were planning to take more of her stem cells than was needed to treat her for the autological stem cell therapy?

A: No. The stem cell therapy was their specialty. It was new to me. I had no frame of reference.

Q: Had you discussed with the Keatings the fact that some of the stem cells

could be used for research?

A: No.

Q: When did you find out that the stem cells had been used for research?

A: When I spoke to Dr. Wallace and Dr. Brockette in their lab after receiving a phone call from the Keatings.

Q: What did you do afterwards?

A: Spoke to Georgia Ray in the General Counsel's office and then called the Keatings back.

Q: What did you tell the Keatings?

A: That the stem cells had been used for research and that I really couldn't discuss it further.

Q: Okay. Let's go back in time a bit. After the second surgery, Etta held on for some time, didn't she?

A: Yes. A couple more weeks.

Q: Were you able to perform the stem cell therapy on Etta?

A: No, we were not.

Q: Why not?

A: She never had the strength to undergo another surgery. She kept getting sicker and sicker. She was too frail.

Q: What was the ultimate cause of her death?

A: Mass trauma from injuries she suffered in the accident.

Q: After she died, did you tell the Keatings that that her stem cells would be destroyed?

A: Yes. I told them that it was my understanding that the child's excised stem cells would be destroyed and treated as medical waste.

Q: But that was not done?

A: No.

Q: What was done with the stem cells?

A: They were used in research performed by Dr. Wallace and Dr. Brockette.

Q: To the extent you have expressed expert medical opinions, are they held with reasonable degree of medical certainty?

A: Yes.

That's all.

DEPOSITION OF SCOTT STRAUS
January 23, 2017

EXAMINATION BY MS. DIAZ:

Q: Did anything done by Dr. Wallace or Dr. Brockette in the second surgery cause Etta's death?

A: No.

Q: Did anything done by Dr. Wallace or Dr. Brockette in the second surgery contribute in any way to Etta's death?

A: No.

Q: Did anything done by Dr. Wallace or Dr. Brockette in the second surgery put Etta at risk?

A: Possibly, but we determined that the benefits from the autologous stem cell therapy outweighed the risk.

Q: Let me ask it this way. The complaint here is that more stem cells than were needed for the stem cell therapy were taken in the second surgery. Could taking more stem cells than were needed have put Etta at greater risk?

A: I don't see how. Not more risk than removing the stem cells in the first place.

I'm finished.

END OF DEPOSITION

DEPOSITION OF NATALIE MASOOD
January 26, 2017

EXAMINATION BY MS. CHENG:

Q: What is your name?

A: Natalie Masood.

Q: Tell us why you're here.

A: I have documents related to a patent owned by the hospital and two of its doctors.

Q: From which hospital?

A: Alastor City University Hospital.

Q: What is your job there?

A: I work in the General Counsel's office.

Q: What is your job there?

A: I am the technology transfer officer.

Q: What is a technology transfer officer?

A: I am responsible for monitoring everything related to the university's intellectual property.

Q: How long have you worked there?

A: One year.

Q: Do you have custody of records related to the ownership and payments related to patents owned by the hospital?

A: Uh-huh.

Q: Have you reviewed the records in Exhibit U?

A: Those are the documents in our files.

Q: What are those records?

A: Summaries of payments received from Bell Pharmaceuticals.

Q: Are these records relating to helolirsen?

A: Yes.

Q: Have you reviewed the records in Exhibit R?

A: Those are the documents in our files.

Q: What are those records?

A: A patent assignment signed by Dr. Zoe Brockette and Dr. Walter Wallace to Alastor City University Hospital.

Q: Are these records relating to helolirsen?

A: Yes.

Q: Who prepares the documents in Exhibits R and U?

A: I do.

Q: Is this a normal procedure to make these documents?

A: Uh-huh.

Q: Were these entries prepared at or near the time shown on each entry?

A: They were.

Q: Were these documents prepared in the ordinary scope of the business?

A: They were.

Q: Where were these documents retrieved from?

A: A file in my office.

Q: Is it a regular part of your business to keep and maintain records of this type?

A: Uh-huh.

Q: Are these documents of the type that would be kept under your custody or control?

A: Yes.

I have no other questions. Pass the witness.

DEPOSITION OF NATALIE MASOOD
January 26, 2017

EXAMINATION BY MS. DIAZ:

No questions.

END OF DEPOSITION

DEPOSITION OF MALIK VERLAINE
January 26, 2017

EXAMINATION BY MS. CHENG:

Q: What is your name?

A: Malik Verlaine.

Q: What is your occupation?

A: I am a hospital administrator.

Q: At which hospital?

A: Alastor City University Hospital.

Q: How long have you worked there?

A: For twelve years.

Q: Do you have custody of medical records at the hospital?

A: I do.

Q: Have you reviewed the records in Exhibit V?

A: I have.

Q: What are those records?

A: Billing records.

Q: Relating to whom?

A: Henrietta Louise Keating.

Q: Who prepares this document?

A: Our accounting department.

Q: How are these prepared?

A: Electronically. We computerized our process a couple years ago.

Q: Were these entries prepared at or near the time shown on each entry?

A: Yes.

Q: Were these documents prepared in the ordinary scope of the business of your hospital?

A: Yes.

Q: Where are these documents stored after they are prepared?

A: On the hospital's secure server.

Q: Where were these documents retrieved from?

A: From the hospital's secure server. I printed them out.

Q: Is it a regular part of your business to keep and maintain records of this type?

A: Yes.

Q: Are these documents of the type that would be kept under your custody or control?

A: They are.

I have no other questions. Pass the witness.

EXAMINATION BY MS. DIAZ:

No questions.

END OF DEPOSITION

REPORT OF DR. PAT BYERS

1. I have been asked to testify on behalf of Louis and Louise Keating to help the jury determine the appropriate damages for defendants' conduct.

2. Etta Keating was taken to Alastor City University Hospital after a tragic car accident. She was comatose and required emergency care to stabilize her. During the course of her treatment, Dr. Walter Wallace and Dr. Zoe Brockette were brought in for a neurological consult. A test had revealed that Etta had early onset muscular dystrophy. The doctors recommended autological stem cell therapy, which required surgery to remove stem cells from the bone marrow in Etta's hip. When the doctors took the stem cells, they took more than were needed for the therapy. The doctors had ongoing research projects and decided to use Etta's stem cells to expand their research, which had previously focused only on adult subjects with incurable neurological disorders. After Etta died before the therapy could be performed, the doctors also used these stem cells for research—instead of destroying them pursuant to hospital policy and the Keatings' wishes. All of this was done without the Keatings' informed consent.

3. In assessing the egregiousness to help the jury in its determination of the appropriate remedies for the doctors' conduct, I begin with three well-established principles. First, a person has the right, in the exercise of control over her own body, to determine whether or not to submit to lawful medical treatment. Second, the patient's consent to treatment, to be effective, must be an informed consent. Third, in soliciting the patient's consent, a physician has a fiduciary duty to disclose all information material to the patient's decision. These principles lead to the trial court to reach the following conclusions: (1) a physician must disclose personal interests unrelated to the patient's health, whether research or economic, that may affect the physician's professional judgment; and (2) a physician's failure to disclose such interests may give rise to a cause of action for performing medical procedures without informed consent or breach of fiduciary duty.

4. To be sure, questions about the validity of a patient's consent to a procedure typically arise when the patient alleges that the physician failed

to disclose medical risks, as in malpractice cases, and not when the patient alleges that the physician had a personal interest, as in this case. The concept of informed consent, however, is broad enough to encompass the latter. The scope of the physician's communication to the patient must be measured by the patient's need, and that need is whatever information is material to the decision.

5. Given the novel scientific setting in which this case arises and the considerable interest this litigation has engendered within the medical research community and the public generally, it is easy to lose sight of the fact that the specific allegations on which the complaint in this case rests are quite unusual, setting this matter apart from the great majority of instances in which donated organs or cells provide the raw materials for the advancement of medical science and the development of new and beneficial medical products. Ordinarily, when a patient consents to the use of a body part for scientific purposes, the potential value of the excised organ or cell is discovered only through subsequent experimentation or research, often months or years after the removal of the organ. In this case, however, the complaint alleges that doctors recognized value in Etta's cells before their removal from plaintiff's body—albeit not the extent of the value because they did not know at that point the cells were immortal. Despite this knowledge, the doctors allegedly failed to disclose these facts or her interest in the cells to the Keatings.

6. The notion espoused by the doctors that civil liability will unduly penalize those engaged in socially useful activities is overstated and factually inaccurate. While these doctors did not specifically know the Keatings' wishes regarding their research, it is because the doctors never asked or even told them. Of course, research on human cells plays an increasingly important role in the progress of medicine, and that the manipulation of those cells by the methods of biotechnology has resulted in numerous beneficial products and treatments. Yet it does not necessarily follow that significant damages in this case will hinder research by restricting access to the necessary raw materials. And the fear of large adverse monetary judgment will undoubtedly deter unscrupulous and unethical research methods, not the development or distribution of potentially beneficial new drugs.

7. Our society acknowledges a profound ethical imperative to respect the human body as the physical and temporal expression of the unique human persona. One manifestation of that respect must be that research with human cells that results in significant economic gain for the researcher and no gain for the patient offends the traditional mores of our society. Such research tends to treat the human body as a commodity—a means to a profitable end. The dignity and sanctity with which we regard the human whole, body as well as mind and soul, are absent when we allow researchers to further their own interests without the patient's participation by using a patient's cells as the basis for a marketable product.

8. Our society values fundamental fairness in dealings between its members, and condemns the unjust enrichment of any member at the expense of another. This is particularly true when, as here, the parties are not in equal bargaining positions. The commercial products of the biotechnological revolution hold the promise of tremendous profit. These profits are currently shared exclusively between the biotechnology industry, the universities that support that industry, and the doctors performing the research. There is, however, a third party to the biotechnology enterprise—Etta Keating, the patient who is the source of the stem cells from which all these profits are derived. While she was a silent partner, her contribution to the venture was absolutely crucial—but for the stem cells of Etta's body taken by the doctors there would have been no helolirsen at all. Yet the doctors have steadfastly denied that the Keatings are entitled to any share whatever in the proceeds of Etta's stem cells. And when the trial court granted summary judgment on liability because no consent was obtained, the doctors assert that nothing more than nominal damages are appropriate. This is both inequitable and immoral.

9. Informed consent is more than just a signature on a form, it is a process of information exchange that may include, in addition to reading and signing the informed consent document, subject recruitment materials, verbal instructions, question/answer sessions and measures of subject understanding. While a researching doctor need not personally obtain the consent, that doctor remains ultimately responsible, even when delegating the task of obtaining informed consent to another individual

knowledgeable about the research. In this case, Dr. Wallace and Dr. Brockette had no role in obtaining consent. Dr. Straus, who at least had a conversation with the Keatings, knew very little about the procedure, the intended stem-cell therapy, or the intended research so he could not adequately discuss the issues with the family.

10. The informed consent form used for the surgery (I understand the parties refer to it as Exhibit S) is woefully inadequate. Had the doctors used the form they are currently using in the clinical trials (Exhibit T), there would not be an issue. Of course, the doctors may not have been able to perform research on Etta's stem cells either if the Keatings withheld consent.

11. Society depends on the medical research community to conduct effective, ethical and thorough research in the development of our medicines and treatments. High standards of ethical practice are crucial. Researchers must be held to ethical and moral standards. The integrity of science depends on the integrity of research.

12. My opinions are based on my experience as a doctor, researcher, and bioethicist. I have reviewed all of the depositions taken and the exhibits offered in this case.

13. I am being paid $350 an hour for my work. I anticipate I will expend roughly 25 hours on this project, inclusive of the time needed to testify to the jury.

Respectfully submitted

/s/ Pat Byers

Pat Byers, M.D., PhD

February 1, 2017

PAT BYERS, M.D.

PERSONAL DATA

Birth date: XX/XX/1981.
Birthplace: New York, New York.

EDUCATION

Baccalaureate Degree, BS, Biology 2001, Kenyon College.

Advanced Degrees, MD, 2006, University of Arizona Medical School.

PhD. in Bioethics 2010, University of South Texas.

Residency and Fellowship Training:

- Internship: Alastor City Charity Hospital, Alastor City, South Texas. (Pediatrics) September, 2005 - January, 2006.

- Residency: New York University Medical Center, New York, New York. (General Surgery) June 2006 - June 2008.

- Fellowship: Columbia University Medical Center, Center for Bioethics, New York, New York. (Medical Research and Bioethics) January 2008 - June 2009.

PROFESSIONAL EXPERIENCE

- Associate Professor, University of South Texas School of Medicine, Alastor City, South Texas. (Courses in Medical Research and Bioethics) 2010 - present.

- Director of Medical Research Department, Alastor City Memorial Hospital, Alastor City, South Texas. 2012 - present.

- Chair, Transplantation Ethics Committee, Alastor City Memorial Hospital, Alastor City, South Texas. 2012 - present.

- Peer Reviewer, American Journal of Bioethics, 2012 - present.
- Peer Reviewer, Princeton Journal of Bioethics Technical Review, 2013 - present.
- Contributing Editor, American Journal of Transplantation Ethics. 2014 - present.
- Georgetown University, Kennedy Institute of Ethics, Intensive Bioethics Course, Washington, D.C. (Course in Ethics in Medical Research) June - August, 2014.

HONORS AND CERTIFICATIONS

- Excellence in Teaching Award, Medical Research Department, 2013.
- Astellas Pharma US Research Award, 2015.
- Board Certified, General Surgery, 2011.

PROFESSIONAL SOCIETIES

- American Society of Medical Research.
- International Society of Bioethics.

Numerous articles and presentations

SUPPLEMENTAL REPORT OF DR. PAT BYERS

1. This supplement responds to the assertions made by Sam Stevens.

2. One of the primary reasons Stevens asserts for not giving the Keatings a royalty interest is that "the subject matter of the patent—the new drug—cannot be Plaintiffs' property." Stevens then offers a dual explanation: "This is because the patented cell line is factually and legally distinct from the stem cells taken from the patient's body." Neither branch of the explanation withstands analysis. First, in support of their statement that helolirsen is "factually distinct" from Etta's stem cells, Stevens delves into science to explain how the two are different but no one disputes these assertions. They are nonetheless a distinction without a difference. But for the use of Etta's immortal cells, the defendants would not have been able to develop helolirsen. Second, in support of their statement that helolirsen is "legally distinct" from Etta's stem cells, Stevens asserts in effect that the Keatings cannot have an ownership interest in the helolirsen because defendants patented it. This assertion wholly fails to meet the Keatings' claim that they are entitled to compensation for defendants' unauthorized use of her bodily tissues before defendants ran to the Patent Office to patent helolirsen. Whatever the legal consequences of that event, it did not operate retroactively to immunize defendants from accountability for conduct occurring long before the patent was granted. Nor did the issuance of the patent necessarily have the drastic effect that Stevens contends. To be sure, the patent granted defendants the exclusive right to make, use, or sell the invention for a period of 17 years. (35 U.S.C. § 154 (2012)). None of those things are part of the Keatings claim. Rather, they seek to show that they are entitled, in fairness and equity, to all of, or at least a significant share in, the profits that defendants have made and will make from their commercial exploitation of Etta's stem cells. What the patients did do, knowingly or unknowingly, is collaborate with the researchers by donating their body tissue. By providing the researchers with unique raw materials, without which the resulting product could not exist, the donors become necessary contributors to the product. Concededly, the patent is not granted for the cell as it is found in nature, but for the modified biogenetic product. But the uniqueness of the product that gives rise to its patentability stems from the uniqueness of the original cell.

3. Stevens' assertion of all the good flowing from medical research is ironic, given that the examples cited are from the first and the most legendary thefts of bodily materials in medical history. Polio vaccines, cloning technicals, and thousands of other drugs can be traced to the theft of tissue at Johns Hopkins Hospital in Baltimore, Maryland. (*See* Rebecca Skoot, *The Immortal Life of Henrietta Lacks*). In 1951, a poor tobacco farmer by the name of Henrietta Lacks was in the segregated ward of Johns Hopkins Hospital—where she was diagnosed with the cervical cancer that would kill her—when scientists took her cells without her knowledge. Those cells, now known the world over, became a powerful force in medicine, responsible for the polio vaccine, in vitro fertilization, gene mapping and more. The cells—named after Lacks as "He-La cells—were the first to survive and continue to grow in a lab, a breakthrough for scientists who had tried and failed for many years to do so. Because of this regenerative property, her cells were bought and sold by the billions for research projects around the world—and even in space—yet Lacks remained nearly unknown. Her family, which did not learn about the cells until the 1970s when researchers wanted to continue their research on her children, never benefited from the profit of her cells, which are still in use and for sale today.

4. I do not believe this to be a minor issue. I do not believe this to be a technical violation of informed consent law. Most of the time, patients are unaware of what doctors are doing to them. And a four-year-old in a comatose state certainly would have no idea that the doctors took more stem cells than were needed and, after she died, used those stem cells for research as well. In fact, the Keatings only learned of the theft when the doctors were honored for their unethical conduct.

5. Researchers must be held to ethical and moral standards. The integrity of science depends on the integrity of research.

Respectfully submitted

/s/ Pat Byers

Pat Byers, M.D., PhD

February 21, 2017

REPORT OF SAM STEVENS

Introduction

I have been hired by Alastor City University Hospital, Dr. Walter Wallace, and Dr. Zoe Brockette. As the jury must determine the appropriate damages in this case, I have been asked to explain the effect anything beyond nominal damages will have on medical research and the development of new drugs or treatments that help us all.

Qualifications / Methodology

Opinions presented in this report are based upon my background, experience and expertise in the field of medicine, research, and bioethics.

Basis of Opinion

The basis for my expert opinion consists of a review of the following information:

Records from:

- Alastor City University
- Alastor City University Hospital

Additional material relied upon included the depositions of:

- Louis Keating
- Louise Keating
- Walter Wallace, M.D., PhD
- Zoe Brockette, M.D., PhD
- Scott Straus, M.D.
- Natalie Masood

- Malik Verlaine

I also relied upon:

- Photos of Etta Keating;
- Patent Assignment;
- Informed Consent Form;
- Test Results;
- Revised Informed Consent Form; and
- Newspaper Article.

I also relied on my experience as a doctor, as a researcher, and as a bioethicist.

Fees: $400.00 per hour. To date, I have worked 13 hours. I anticipate an additional 7 hours of work through trial.

Opinions

This case presents an unfortunate legal dilemma set against the backdrop of a historic medical breakthrough. Dr. Wallace and Dr. Brockette were jointly engaged in a noble and dogged pursuit to detect and find a cure for an incurable neurological disorder.

Plaintiffs seek the proceeds of the Patent No. 92364215682R12, a share of the royalty interest in the patent, the cost of the surgery where the stem cells were removed, and mental anguish damages. This would be significant liability, which would have a far-reaching impact on the field of medical research for a technical violation of informed consent laws. Under these circumstances, these measures of damages would be inappropriate for a number of reasons.

First, nothing the doctors did in this case harmed the patient in any way. The surgery did not cause her death. The surgery did not contribute to her

death. For that reason, the plaintiffs have not pursued a medical malpractice claim. And medical malpractice claims stand to protect patients harmed by the surgery to extract the stem cells.

Second, Dr. Wallace and Dr. Brockette used biological material that the Plaintiffs claim should have been destroyed. They wanted it thrown away. Instead, the doctors used it move health care forward to benefit the greater good. They did not sacrifice the medical privacy of Etta, or the Keatings in the process. Had they done so, federal and state privacy laws would address the issue. Nor did they steal the tissue. There was simply a miscommunication as to the scope of the signed consent. Had they truly duped Plaintiffs, again federal and state law would address the issue. But Plaintiffs have not alleged facts that would implicate either concern.

Third, the subject matter of the patent—the new drug—cannot be the Plaintiffs' property, and their claim effectively does an end-run around that fact. The patented drug is both factually and legally distinct from the cells taken from the patient's body. Federal law permits the patenting of organisms that represent the product of human ingenuity, but not naturally occurring organisms. It is this inventive effort that patent law rewards, not the discovery of naturally occurring raw materials. Thus, Plaintiffs' allegations that they essentially own the cells, the cell line and the products derived from it are inconsistent with the patent, which constitutes an authoritative determination that the new drug is the product of invention.

Fourth, research on human cells plays a critical role in medical research, which significant liability in this case could threaten. This is so because researchers are increasingly able to isolate naturally occurring, medically useful biological substances and to produce useful quantities of such substances through genetic engineering. These efforts continue to bear fruit. Stem cells and the cell lines generated from them have been involved in significant medical breakthroughs. Jonas Salk used them to test and develop the first polio vaccine in the 1950s. Theodore Puck and Philip Marcus at the University of Colorado first used stem cells for cloning in 1955. Since that time, stem cells have been used to advance research into cancer, AIDS, the effects of radiation and toxic substances, gene mapping, and many other scientific pursuits. Products developed through biotechnology that have been approved for marketing in this country include treatments and tests for leukemia, cancer, diabetes, dwarfism,

hepatitis-B, kidney transplant rejection, emphysema, osteoporosis, ulcers, anemia, infertility, and gynecological tumors, to name but a few.

Much is at stake in this case. No state legislature or court has ever allowed a patient to assert a direct claim for damages or an ownership share in what was generated from the excised cells. I do not believe an indirect claim such as the one Plaintiffs have asserted is proper. I believe granting Plaintiffs a windfall under these circumstances is appropriate.

Respectfully submitted,

/s/ Sam Stevens

_____

SAM STEVENS, M.D., PhD

February 13, 2017

Sam Stevens, MD, PhD

CURRICULUM VITAE

Work Address:	Stanford University Finnegan Hall Campus Mail Stop 4R12 Palo Alto, California 94305
Tel:	650-123-7654
Fax:	650-123-7655
Date of Birth:	XX/XX/1980
Place of Birth:	Cedar Point, North Carolina

EDUCATION:

2001	BSc. (Chemistry), University of St. Andrews, St. Andrews, Scotland, UK
2005	MBBS (Medicine), University College Hospital University of London, London, England, UK

INTERNSHIP:

2005	National Institute of Health Bethesda, Maryland *6 month internship with rotations in Division for Musculoskeletal Diseases*

RESIDENCY:

2005-2007	Stanford University Hospital Palo Alto, California *2 year residency with emphasis in General Surgery*

ACADEMIC APPOINTMENTS:

2009-2011	Assistant Director of Neurological Research Stanford University Palo Alto, California

HOSPITAL APPOINTMENTS:

2007 - 2009	Assistant Physician Alastor City Methodist Hospital Alastor City, South Texas
2011 - present	Director of Medical Research Coastal California University San Francisco, California
2013 - present	Chair of UNOS Compliance Committee Coastal California University Medical Center San Francisco, California
2011 - present	Treating Physician Bay Area Rehabilitation Hospital San Francisco, California

HONORS AND AWARDS:

2010	Mentoring Award Society of Teaching Scholars Stanford University
2014	American College of Legal Medicine Achievement Award
2016	Research Fellow American Society of Ethical Medical Researchers

List of Presentations available upon request

EXHIBIT Q — 1

EXHIBIT Q — 2

PATENT ASSIGNMENT AGREEMENT

THIS PATENT ASSIGNMENT AGREEMENT (the "Agreement") is dated December 1, 2014, but made effective as of November 14, 2014 (the "Effective Date"), by and between Walter Wallace and Zoe Brockette ("ASSIGNORS"), and Alastor City University ("ASSIGNEE") (each a "Party" and together the "Parties").

WHEREAS ASSIGNORS assigned and transferred to ASSIGNEE, and ASSIGNEE received from ASSIGNORS, a one-third interest (33.33%) in the hololirisen, which is recorded as Patent No. 92364215682R12; and

WHEREAS, the Parties wish to document for recordation purposes the formal assignment to ASSIGNEE of ASSIGNORS' right, title and interest in and to the Assigned Patents.

NOW, THEREFORE, the Parties hereby agree as follows:

1. For good and valuable consideration, receipt of which is hereby acknowledged, ASSIGNORS hereby assigns to ASSIGNEE a one-third interest (33.33%) in and to: (i) the hololirisen patent.

2. ASSIGNORS warrant and covenant that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been or will be made to others by ASSIGNORS, and that they possess the full right to convey the same as herein expressed.

3. This Agreement shall be construed in accordance with and governed by the laws of the State of South Texas, excluding any choice of law rules which direct the application of the laws of another jurisdiction, and shall be binding on the heirs, assigns, representatives and successors of ASSIGNORS and extend to the successors, assigns and nominees of ASSIGNEE

4. This Agreement constitutes the sole understanding of the Parties with respect to the transactions provided herein and supersedes and merges herein any previous agreements and understandings, oral and written, between the Parties hereto with respect to the subject matter hereof.

[Signature page follows.]

EXECUTED AND MADE EFFECTIVE as of the Effective Date in Alastor City, South Texas.

ASSIGNORS

WALTER WALLACE, MD, PhD

Walter Wallace — 11 - 14 - 14

(Signature) (Date)

ZOE BROCKETTE, MD, PhD

Zoe Brockette — 14 Nov 14

(Signature) (Date)

ASSIGNEE

ALASTOR CITY UNIVERSITY

[illegible] Fallon — 11/14/14

(Signature) (Date)

GENERAL COUNSEL

(Title)

ALASTOR CITY UNIVERSITY HOSPITAL
INFORMED CONSENT FORM

DATE: APRIL 2, 2013

PATIENT: KEATING, HENRIETTA LOUISE (MINOR)

DOCTOR: STRAUS, SCOTT, M.D.

PROCEDURE: SPLENECTOMY AND REMOVAL OF BONE-MARROW DERIVED STEM CELLS FOR AUTOLOGOUS STEM-CELL THERAPY

DATE OF PROCEDURE: APRIL 2, 2013

I hereby give consent to the above listed physician and any other medical professionals deemed necessary to perform any operative measures and under any anesthetic, either local or general, for the proper care and treatment of the patient listed above for the procedure listed above.

Subject/Patient*	Date
Louis Keating	4-2-13
Legal Guardian/Advocate/Witness (if required)**	Date
Henrietta Keating	4/2/13
Legal Guardian/Advocate/Witness (if required)**	Date

*A minor's signature on this line indicates his/her assent to participate in this study. A minor's signature is not required if he/she is under 7 years old.

**The presence and signature of an impartial witness is required during the entire informed consent discussion if the patient or patient's legally authorized representative is unable to read.

ALASTOR CITY UNIVERSITY HOSPITAL
CLINICAL TRIAL CONSENT FORM

INVESTIGATOR'S NAME: JULIANA WALLACE
PROJECT # 4536867RR12

Introduction

Alastor City University Hospital would like to remove stems cells from your bone marrow for future research. If you agree, the stem cells will be kept and may be used in research to learn more about other diseases.

Reports about research done with your stem cells will not be given to you or your doctor. These reports will not be put in your health record. The research will not have an effect on your care.

Things To Think About

The choice to let us use for future research is up to you. No matter what you decide to do, it will not affect your care.

If you decide now that your stem cells can be used for research, you can change your mind at any time. Contact Alastor City University Hospital and let us know that you do not want us to use your stem cells. Then any stem cells that remains will no longer be used for research.

Your stem cells will be used only for research and will not be sold. The research done with your stem cells may help to develop new products in the future. You will not receive any money if this occurs.

Research with stem cells can help to find out more about what causes certain diseases, how to prevent them, and how to treat them. Research using tissue can also answer other health questions.

Many different kinds of studies use stem cells. Some researchers may develop new tests to find diseases. Others may develop new ways to treat or even cure diseases. In the future, some of the research may help to develop new products, such as tests and drugs.

Some research looks at diseases that are passed on in families (called genetic research). Research done with your stem cells may look for genetic causes and signs of disease. Even if your stem cells is used for this kind of research, the results will not be put in your health records.

It is hoped that the results of research on your stem cells and stem cells from other patients will provide information that will help other patients in the future. However, there will be no direct benefit to you because your stem cells may not be used for some time after you donate it and because research can take a long time. The research that may be done with your stem cells is not designed specifically to help you. The benefits of research using stem cells include learning more about what causes diseases, how to prevent them, and how to treat them.

You will not receive the results of research done with your stem cells. This is because research can take a long time and must use stem cell samples from many people before results are known. Results from research using your stem cells may not be ready for many years and will not affect your care right now, but it may be helpful to people like you in the future.

To do research with your stem cells, researchers may need to know some things about you. (For example: What is your race or ethnic group? How old are you? Have you ever smoked?) This helps researchers answer questions about diseases. The information that will be given to the researcher includes your age, sex, race, diagnosis, treatments, and possibly some family history. This information is collected from your health record and sent to those in charge of the Clinical Trial but without your name or other identifying information.

The greatest risk to you is the release of information from your health records. Sometimes health records have been used against patients and families. For example insurance companies may deny a patient insurance or employers may not hire someone with a certain illness (such as AIDS or cancer). The results of genetic research may not apply only to you, but to your family members. For diseases caused by gene changes, the information in one person's health record could be used against family members.

Alastor City University Hospital will protect your records so that your name, address, and phone number will be kept private, unless otherwise required by law. All information and samples obtained for this study will be assigned a code. No names will be used or other identifiers on samples to link information to a specific person. A key to the code will be kept in a separate locked file in the investigator's office. The chance that this information will be given to someone else is very small.

If you have any questions regarding your rights as a participant in this research and/or concerns about the study, or if you feel under any pressure to enroll or to continue to participate in this study, you may contact the Alstor City University Hospital Institutional Review Board (which is a group of people who review the research studies to protect participants' rights) at (254) 123-3015.

You may ask more questions about the study at any time. For questions about the study, contact the person whose name appears at the top of this form.

A copy of this consent form will be given to you to keep.

SIGNATURE PAGE

I agree to allow my stem cells to be used for research. I confirm that I have read this consent form and my questions have been answered.

Subject/Patient*	Date
Legal Guardian/Advocate/Witness (if required)**	Date
Additional Signature (if required) (identify relationship to subject)	Date

*A minor's signature on this line indicates his/her assent to participate in this study. A minor's signature is not required if he/she is under 7 years old.
**The presence and signature of an impartial witness is required during the entire informed consent discussion if the patient or patient's legally authorized representative is unable to read.

SIGNATURE OF STUDY REPRESENTATIVE

I have explained the research and have answered questions regarding the study to the best of my ability.

Study Representative***	Date

***Study Representative is a person authorized to obtain consent.

IF THE PATIENT IS INCOMPETENT TO GIVE CONSENT, COMPLETE THE FOLLOWING:

I, _____, hereby certify that I am _____
(Relationship to Patient)
of _____ and duly authorized to execute the foregoing.
(Name of Patient)

I consent to the *research study, experimental treatment, test, drug, etc.* as described in the attached consent form.

_____ _____
Legal Guardian/Patient Representative Date

_____ _____
Study Representative* Date

_____ _____
Witness (if required)** Date

*Study Representative is a person authorized to obtain consent.

**Regulations do not require the signature of a witness when the patient or patient's legally authorized representative is able to read and is capable of understanding the consent form document.

Alastor City University
General Counsel's Office
Intellectual Property Division

Patent Number:	92364215682R12
Reference:	Helolirsen
Patent Date:	November 18, 2014
Owned by University:	33.33%
Other Owners:	Walter Wallace (33.33%) Zoe Brockette (33.33%)

Financial Activity for 2016

04.16.16	$1,500,000	from Bell Pharmaceuticals (upfront payment for licensing of patent)
04.23.16	($500,000)	to Walter Wallace (share of upfront payment for licensing of patent)
04.23.16	($500,000)	to Zoe Brockette (share of upfront payment for licensing of patent)
05.01.16	$350,000	from Bell Pharmaceuticals (monthly payment for clinical trials)
05.08.16	($116,666.66)	to Walter Wallace (share of monthly payment for clinical trials)
05.08.16	($116,666.66)	to Zoe Brockette (share of monthly payment for clinical trials)
06.01.16	$350,000	from Bell Pharmaceuticals (monthly payment for clinical trials)
06.08.16	($116,666.66)	to Walter Wallace (share of monthly payment for clinical trials)
06.08.16	($116,666.66)	to Zoe Brockette (share of monthly payment for clinical trials)
07.01.16	$350,000	from Bell Pharmaceuticals (monthly payment for clinical trials)
07.08.16	($116,666.66)	to Walter Wallace (share of monthly payment for clinical trials)
07.08.16	($116,666.66)	to Zoe Brockette (share of monthly payment for clinical trials)
08.01.16	$350,000	from Bell Pharmaceuticals (monthly payment for clinical trials)
08.08.16	($116,666.66)	to Walter Wallace (share of monthly payment for clinical trials)
08.08.16	($116,666.66)	to Zoe Brockette (share of monthly payment for clinical trials)
09.01.16	$350,000	from Bell Pharmaceuticals (monthly payment for clinical trials)

09.08.16	($116,666.66)	to Walter Wallace (share of monthly payment for clinical trials)
09.08.16	($116,666.66)	to Zoe Brockette (share of monthly payment for clinical trials)
10.01.16	$350,000	from Bell Pharmaceuticals (monthly payment for clinical trials)
10.08.16	($116,666.66)	to Walter Wallace (share of monthly payment for clinical trials)
10.08.16	($116,666.66)	to Zoe Brockette (share of monthly payment for clinical trials)
11.01.16	$350,000	from Bell Pharmaceuticals (monthly payment for clinical trials)
11.08.16	($116,666.66)	to Walter Wallace (share of monthly payment for clinical trials)
11.08.16	($116,666.66)	to Zoe Brockette (share of monthly payment for clinical trials)
12.01.16	$350,000	from Bell Pharmaceuticals (monthly payment for clinical trials)
12.08.16	($116,666.66)	to Walter Wallace (share of monthly payment for clinical trials)
12.08.16	($116,666.66)	to Zoe Brockette (share of monthly payment for clinical trials)

Amount Received in 2016	-	$4,300,000.00
Amount Paid out in 2016	-	$2,866,666.56
Revenue in 2016	-	$1,433,333.44

Alastor City University
General Counsel's Office
Intellectual Property Division

Patent Number:	92364215682R12
Reference:	Helolirsen
Patent Date:	November 18, 2014
Owned by University:	33.33%
Other Owners:	Walter Wallace (33.33%) Zoe Brockette (33.33%)

Financial Activity for 2017

01.02.17	$350,000	from Bell Pharmaceuticals (monthly payment for clinical trials)
01.09.17	($116,666.66)	to Walter Wallace (share of monthly payment for clinical trials)
01.09.17	($116,666.66)	to Zoe Brockette (share of monthly payment for clinical trials)
02.01.17	$350,000	from Bell Pharmaceuticals (monthly payment for clinical trials)
02.08.17	($116,666.66)	to Walter Wallace (share of monthly payment for clinical trials)
02.08.17	($116,666.66)	to Zoe Brockette (share of monthly payment for clinical trials)

Amount Received in 2017	-	$700,000.00
Amount Paid out in 2017	-	$466,666.64
Revenue in 2017	-	$233,333.36

ALASTOR CITY UNIVERSITY HOSPITAL

123 University Drive
Alastor City, South Texas 76765
294.733.7044 (Phone)

Louis Keating
432 Industrial Street, Apt. 231
Alastor City, South Texas 76761

Account No. KEAT23197
Patient - Keating, Henrietta Louise

THIS IS YOUR BILLING STATEMENT

The employees of Alastor City University Hospital appreciate the opportunity to care for you.

Please verify the accuracy of the information below and review the amount due.

If you do not have insurance, you may be eligible for a government-sponsored program. For information, please visit www.coverforall.org.

Customer Service Representatives are available to assist you with any questions you have, applications for financial assistance, and options for payment arrangements.

Statement Date June 1, 2013

Account Summary

Service Dates - 04/04/13 to 04/16/13
(BILL 2 OF 2)

Account No. KEAT23197

Billed Charges $542,358.29

Adjustments ($2,204.67)

Insurance Payments ($116,876.13)

Patient Payments ($2,500.00)

Amount Due $0

Can We Help?

Representatives are available weekdays from 8 a.m. to 5:30 p.m.

Customer Service 294.323.2233
Pay Your Bill 294.323.2244
Financial Assistance 294.323.2255

Pay online at www.achu.com/PayMyBill

Learn more about your bill or obtain information on financial assistance at www.achu.com/Billing

OUR SPECIALTY IS YOU

Alastor City University Hospital

Test Results

04/02/13

Patient: Keating, Henrietta Louise (4 years)

Component	Result	Permissible Range
Creatine Kinase Level	3440	(20-198 U/L)

Pure Genius: Two Local Physicians Claim 2016 Webber Prize for Medical Breakthrough

October 14, 2016
by Isobel Stevens Duquette
Alastor City Tribunal

Dr. Walter Wallace and Dr. Zoe Brockette, lead researchers at the Center for Innovative Medicine at Alastor City University Hospital, have been awarded the prestigious 2016 Adele Webber Prize for excellence in medical research at a ceremony at the Alastor City Hall. The prize is presented annually by the Duquette Foundation to recognize the contributions of scientists, physicians, and public servants who have made major advances in the understanding, diagnosis, treatment, and prevention of human disease.

The Webber Prize recognizes the work of Dr. Wallace and Dr. Brockette in developing a treatment for certain incurable neurological disorders in children. Their research, initially performed through a form of therapy where stem cells are removed from a patient and given back to them a few weeks later, helped to discover helolirsen, which will be marketed under the name helojuvenex. The new drug has already received breakthrough-therapy status from the FDA and has been licensed to the pharmaceutical giant, Bell Pharmaceuticals.

At the ceremony last night, Mayor Carson Alastor presented Dr. Wallace and Dr. Brockette with the Prize, which includes a $100,000 grant to Alastor City University.

“We are very proud. We hope our work will help people,” Dr. Brockette said. She added, “we were unable to help the young girl whose amazing stem cells started us on this journey back in April of 2013. But other little girls and boys will certainly benefit from what we learned from her stem cells.”

Committed to making the discoveries that will relieve the future burden of disease, the newly established Center for Innovative Medicine at Alastor City University Hospital brings together more than 20 internationally-renowned research teams. Its researchers are supported by world-class technology and infrastructure, and partner with industry, clinicians and researchers internationally to enhance lives through discovery. Alastor City and the rest of the world are certainly fortunate for the Center, Dr. Wallace, and Dr. Brockette. They are certainly making a difference.