Report from ACD Working Group for Human Embryonic Stem Cell (hESC) Review

Jeffrey R. Botkin, M.D., M.P.H.
Chair, ACD Working Group for hESC Review

Advisory Committee to the Director
December 9, 2010

Advisory Committee to the Director, NIH, Working Group for hESC Eligibility Review

- Jeffrey Botkin, M.D., M.P.H., University of Utah School of Medicine
- Dena Davis, J.D., Ph.D., Cleveland-Marshall College of Law
- Pamela Davis, M.D., Ph.D., Case Western Reserve University
- David Grainger, M.D., M.P.H., University of Kansas School of Medicine-Wichita; Center for Reproductive Medicine
- Bernard Lo, M.D., University of California, San Francisco
- Terry Magnuson, Ph.D., University of North Carolina (Chapel Hill)
- Jeffrey Murray, M.D., University of Iowa Children's Hospital
- John O'Shea, M.D., Scientific Director, NIAMS
- Carlos Pavão, M.P.A., Education Development Center Inc, Atlanta

Findings For ACD Consideration

Working Group findings on 16 lines from 5 institutions:

- Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore, India, 2 lines
- Cellartis, Sweden, 3 lines (including a subclone)
- Guangzhou Medical College, Guangdong, China, 6 lines
- Children's Memorial Hospital, Chicago, IL, 3 lines
- University of Texas Health Science Center at Houston, Houston, TX, 2 lines

Section IIB of NIH Guidelines for Human Stem Cell Research

For embryos donated before July 7, 2009 (if Section IIA is not met).

- Embryos were created for reproductive purposes by IVF and no longer need for that purpose
- Donated by donors who gave voluntary written consent for the embryos to be used for research purposes

ACD Working Group also will take into account:

- Principles in Section IIA
- 45 CFR 46 Subpart A (Common Rule)
- Points to Consider: During informed consent process, whether donor(s) were:
  - Informed of other available options pertaining to use of embryos
  - Offered any inducements for the donation
  - Informed about what would happen to the embryos

All submissions presented today reviewed under IIB

Jawaharlal Nehru Centre for Advanced Scientific Research Submission

- Two lines from embryos donated in 2007
- Poor quality embryos not usable for fertility treatment
- Submitter states complies with 2007 guidelines from the Indian Council of Medical Research
- Initially submitted for administrative review; NIH considered and moved to ACD

WG Discussion of Jawaharlal Submission

- Straightforward embryo donation consent;

  states that embryos will be used for research and stem cells are mentioned, but direct connection not made

- Embryo donation form is template; submitter provided assurance that signed consents were reviewed by IVF clinic officials

- Working Group voted unanimously to put forward a positive finding to the ACD.

Cellartis Submission

- Two lines (and one subclone) from embryos donated initially in 2000
- Lines were on NIH Registry under prior federal policy
- Embryos were near 5-year limit for cryopreservation per Swedish law; patients may request extension from national board
- Embryo quality unclear
- Donors consented 4 times over 4 years for use of cells for specific periods of time. Last consent had no end date and allowed for sharing lines beyond Sweden.
- Initially submitted for administrative review; NIH considered and moved to ACD

Discussion of Cellartis Submission

- WG discussed whether statutory limit on cryopreservation affected voluntariness of consent to donate embryos for research.
  - A variety of factors beyond reproductive planning may be relevant to cryopreservation time including cost to couples

- WG noted that many other countries and regions have laws either limiting or prohibiting cryopreservation of embryos, including Australia.

- Endeavour-2 line currently on NIH Registry was from embryo donated in New South Wales, which was subject to 10 year cryopreservation limit as stated in the IVF consent document.

Discussion of Cellartis Submission

- WG voted unanimously to present a positive finding to the ACD, but noted that the specifics of embryo storage limits and other factors that could influence people to choose a donation to research should continue to be considered.

Guangzhou Medical College Submission

- Six lines from embryos donated in 2007
  - non-clinical grade embryos not usable for fertility treatment
- Embryo donation consent signed at the same time as IVF consent
- Approval and ongoing monitoring by hospital IRB
- Working Group noted that couples may have limited options with respect to clinical grade embryos in China due to the one child policy
  - Not a relevant issue for these lines derived from non-clinical grade embryos

WG Discussion of Guangzhou Submission

- Reasonable to agree to donate nonclinical grade embryos in advance of treatment

- Donation rate is 7-8% for research
  - Supports voluntariness of decisions

- Embryo donation consent adequate
  - Different translations of key terms in section *The Subject's Acknowledgement*: "embryo" in Guangzhou translation and "specimen" in NIH translation.

WG Discussion of Guangzhou Submission

- Problematic statements in IVF treatment consents:
  - Multifetal pregnancy reduction necessary in case of pregnancy with more than two fetuses *(WG believes such a provision would be unacceptable in the U.S.)*
  - Patient agrees that ‘children born are completely our own” *(WG notes clinics make mistakes, although rarely)*
  - No significant difference in fetal malformation rate using intracytoplasmic sperm injection compared to natural pregnancies *(WG notes not consistent with current knowledge)*

WG Discussion of Guangzhou Submission

- Most WG members agreed concerns about limits on options for use of remaining embryos not relevant in this specific case since embryos were not clinical grade.

- Working Group voted 7-2 to put forward a positive finding to the ACD.

- Members voting in the minority felt that restrictions on choice in the clinical IVF clinical consent process were potentially coercive. Members voting in majority also expressed concern, but felt consent process for embryo donation in the context of non-clinical grade embryos was sufficiently strong to merit a positive finding.

Children's Memorial Hospital, Chicago Submission

- Lines from embryos donated by patients at 2 different IVF clinics
  - Only lines from embryos donated by Midwest Fertility Center (MFC) patients to be discussed today: CM2, CM6, CM7
- No financial arrangements between IVF clinic and research institution
- All embryos were donated after the release of the 2005 NAS Guidelines

Children's Memorial Hospital Submission

- Midwest Fertility Center, Illinois: have actual consents for embryos donated to create CM2 and CM7

- CM2 from nonfrozen embryo donated after PGD screening in 2007 by handwritten note “donate to Northwestern for research” in embryo disposition form; no other details documented regarding research. Other options listed for embryos are freeze or discard.

- CM6 from nonfrozen embryo donated after PGD screening in 2007 or 2008 (conflicting dates in submission); consent information was given verbally and patients consented verbally.

Children's Memorial Hospital Submission

- CM7 from embryos frozen between 1996-2005, donated between 2006-2007. Several Embryo Storage Notice forms presented.
  - Checkbox “Use … for Research Purposes” on some
  - Options on one form are “Continue to store...”, “Discard…,” or “Other” in which “Please donate for research” was handwritten.

Children's Memorial Hospital Submission

- CM 7: One consent states that account will be sent to collection agency for $3,000 unless payment made or notice returned with order for discard or research. Handwritten note (presumably by donor) that past six letters stated if no response, embryos would be discarded, and the writer is not sure why this did not take place.

Discussion of Children's Memorial Hospital Submission

- WG noted donation forms signed by MFC patients lack the specificity expected at the time regarding stem cell research.
- Apparent lack of rigor in documentation and the embryo donation process brings the adequacy of communication and consent into question.

Discussion of Children's Memorial Hospital Submission

- The WG voted unanimously to suggest that the ACD not recommend approval of the CM2, CM6, and CM7 lines due to the lack of sufficient evidence that donors were making an informed choice about the use of the embryos for stem cell research.

University of Texas Health Science Center at Houston Submission

- 2 lines from embryos donated in 2004
- Embryos initially to be sent to USCF; investigator at USCF left, so embryos were sent to U-TX
- Clinic used “consent to release embryos” forms rather than typical “consent to donate embryos for research” form
- No printed documentation on consent forms that donations were for research purposes
  - references to research were handwritten

Discussion of University of Texas Health Science Center at Houston Submission

- Embryo #1260/line CR1:
  - ‘consent to discard embryo’ form has handwritten note “Please donate for stem cell research at USCF” without date or initials; UCSF was then crossed out, “Rel to Univ of Texas stem cell” handwritten (dated and initialed apparently by clinic)
  - “consent to release embryo” form has “UCSF/UTX” handwritten as recipient (without initials or date)
  - No description of stem cell research

Discussion of University of Texas Health Science Center at Houston Submission

- Embryo #1260/line CR1 (cont.):
  - Form states other options for use of embryo were considered and are unacceptable (including research, which submitter clarified as referring to in-house fertility research)
- Embryo #548/line CR2:
  - "Consent to release embryo" form appears to have "USCF" handwritten in the space for recipient name and then crossed out with "UTX esc program/Eva Zsigmond" added, without dates or initials
  - No description of stem cell research

Discussion of University of Texas Health Science Center at Houston Submission

- Embryo #548/line CR2 (cont.):
  - no other options for use of embryos written on form; submitter states that clinic director says donors were presented with all options available

- For both lines: it is unclear exactly what was written on the forms at the time that the donors signed them.
- It is unclear who made the alterations on the forms, and who saw those changes.
- Documented information provided to the donors is neither clear nor complete.

Discussion of University of Texas Health Science Center at Houston Submission

- The WG voted unanimously to suggest that the ACD not recommend approval of the CR1 and CR2 lines due to the lack of sufficient evidence that donors were making an informed choice about use of the embryos for stem cell research.

Summary Working Group Findings

- ACD should consider recommending to NIH Director that these lines be approved for use in NIH-supported research:
  - Jawaharlal Nehru Centre for Advanced Scientific Research: BJNhem19, 20
  - Guangzhou Medical College: FY-hES1, 3, 5, 7, 8, FY-3PN
  - Cellartis: SA001, SA002/SAOO2.5*

(*SA002.5 is subclone—subclones are not specifically listed on Registry as all subclones of Registry lines are eligible for use)

Summary Working Group Findings

- ACD should consider recommending to NIH Director that these lines be disapproved for use in NIH-supported research:
  - Children's Memorial Hospital, Chicago, IL: CM2, CM6, CM7
  - University of Texas Health Science Center at Houston: CR1, CR2

Guangzhou Medical College

Embryo Donation Consent

Translation from Submitter

(page 6;
1 of 2 pages)

Informed Consent to Donate Discarded Embryos

Research Project : Establishment of human stem cell bank

Research Unit : Guangzhou Key Laboratory of Reproductive and Genetics, The Third Affiliated Hospital of Guangzhou Medical College, Duobao Road 63#, 510150 ,Guangzhou, China

If you do not understand the terminology, please ask the physician or working group members to explanation of any terms or information that you do not know.

Research Objective: Derivation of human embryonic stem cell lines

Privacy : Your medical records and the signed written consent will be kept by Guangzhou Key Laboratory of Reproductive and Genetics, The Third Affiliated Hospital of Guangzhou Medical College. The research results may be published in academic conferences or journals, but your name will be never appeared in the published data.

Benefits: Specimens provided by you will be of great significance to the establishment of human embryonic stem cell bank and the development of stem cell research.
Donation is voluntary behavior, you will not receive any benefit in this trial.

Questions: If you have any questions , please contact with Xiaofang Sun, 020-81292202.

Donors pledge : We have read and understand the information about the research project. We have clearly known the basic concepts of embryonic stem cells. we have known that the study does not produce a new individual or the descendants. The ethical and legal issues involved in the research project have already been made a comprehensive explain. We have got a satisfactory answer that we asked about our participation . Based on personal preference, we are independent, voluntary, not subject to any conditions, threats and forced to sign this consent. We agreed to provide the discarded embryos and medical records tothe Third Affiliated Hospital of Guangzhou

Guangzhou Medical College

Embryo Donation Consent

Translation from Submitter

(page 7;
2 of 2 pages)

Medical College.

We know that it is not a commercial activity of participating in the research. We just provided the discarded embryos in the research project. We will not get any benefits.

We can not track the progress and results of the research project. We have no direct relationship with the research results.

The discarded embryos can not be available to any individual or research units without our consent.

The discarded embryos can not be used to other experiment without our consent.

After signing this consent , we confirm that we agree to provide the discarded embryos for the research project, while we do know that we will not be injuryed to any legal rights.

A total of two pages of this consent, in duplicate, one kept by the donor, the other kept by the research group.

Wife: (Signature) **Husband:** Signature)

Date: March 5,2007 **Date:** March 5,2007

Deputy of The Third Affiliated Hospital of Guangzhou Medical College :Xiaofang Sun(Signature)

Date: March 5,2007

Guangzhou Medical College

Embryo Donation Consent

NIH Translation

(page 8;
1 of 2 pages)

INFORMED CONSENT ON DONATION OF DISCARDED EMBRYOS

TEST TITLE: Establishment of a Human Embryonic Stem Cell Bank

RESEARCH INSTITUTIONS: Guangzhou City Key Laboratory on Reproduction and Genetics
The Third Hospital Affiliated to Guangzhou Medical University
63 Duobao Road, Liwan District, Guangzhou, China
510150

This Informed Consent form may contain certain technical terms that you do not understand. You may ask the doctor in charge of the test or members of the test team to explain any technical terms or information that you do not understand.
Object of the Test: To establish a human embryonic stem cell bank for the purposes of scientific research only but not for clinical use.

Privacy and Confidentiality

Your medical record and the informed consent that you sign will be stored as classified documents and record by the Guangzhou City Key Laboratory on Reproduction and Genetics, the Third Hospital Affiliated to Guangzhou Medical University. The result of the test may be published at academic conferences or on academic journals, but your name, telephone number and other information unrelated to the content of the research will never appear in the publications.

Benefits

The specimens you provide will be of tremendous significance to the establishment of human embryonic stem cell banks. The embryonic stem cell lines so established will be stored for an extended period of time, will be provided to scientific researchers in their studies, and may have commercial value in the future. However, you will not benefit from this test.

Questions

If you have other questions about participation in this study, please contact the following individual: Sun Xiaofang, 020-81292202.

The Subject's Acknowledgement

We have read and understood the above information about this test, are clear about the concept of embryonic stem cell, and know that the study will not produce a new individual or offspring. The person in charge has provided a full explanation of the ethical and legal issues involved in the test, and given us an opportunity to ask questions about this test and our participation. We have received answers to our satisfaction. We have signed this informed consent based on our personal wishes, independently and voluntarily, and free from any duress or coercion, agreeing to provide the Third Hospital Affiliated to Guangzhou Medical University with test specimens and medical record.

Guangzhou Medical College

Embryo Donation Consent

NIH Translation

(page 9;
2 of 2 pages)

We know that participating in this study is not a commercial act, that we merely provide unusable embryos discarded after an embryo transfer, and that we will not benefit from it.

We may not follow the specific progress and result of the test, and the outcome of the test bears no direct relationship with us.

The specimens may not be provided to any individual or research institution without our consent.

The specimens may not be used in any other test in the laboratory without our consent.

By signing this informed consent, we confirm that we agree to provide specimens for this test. Meanwhile, we have made sure that we will not compromise any legal right by participating in this test.

This consent contains two pages in duplicate. One copy is to be kept by the donor of the embryo, and the other will be archived by the test project team.

Wife's signature:
Date: March 5, 2007

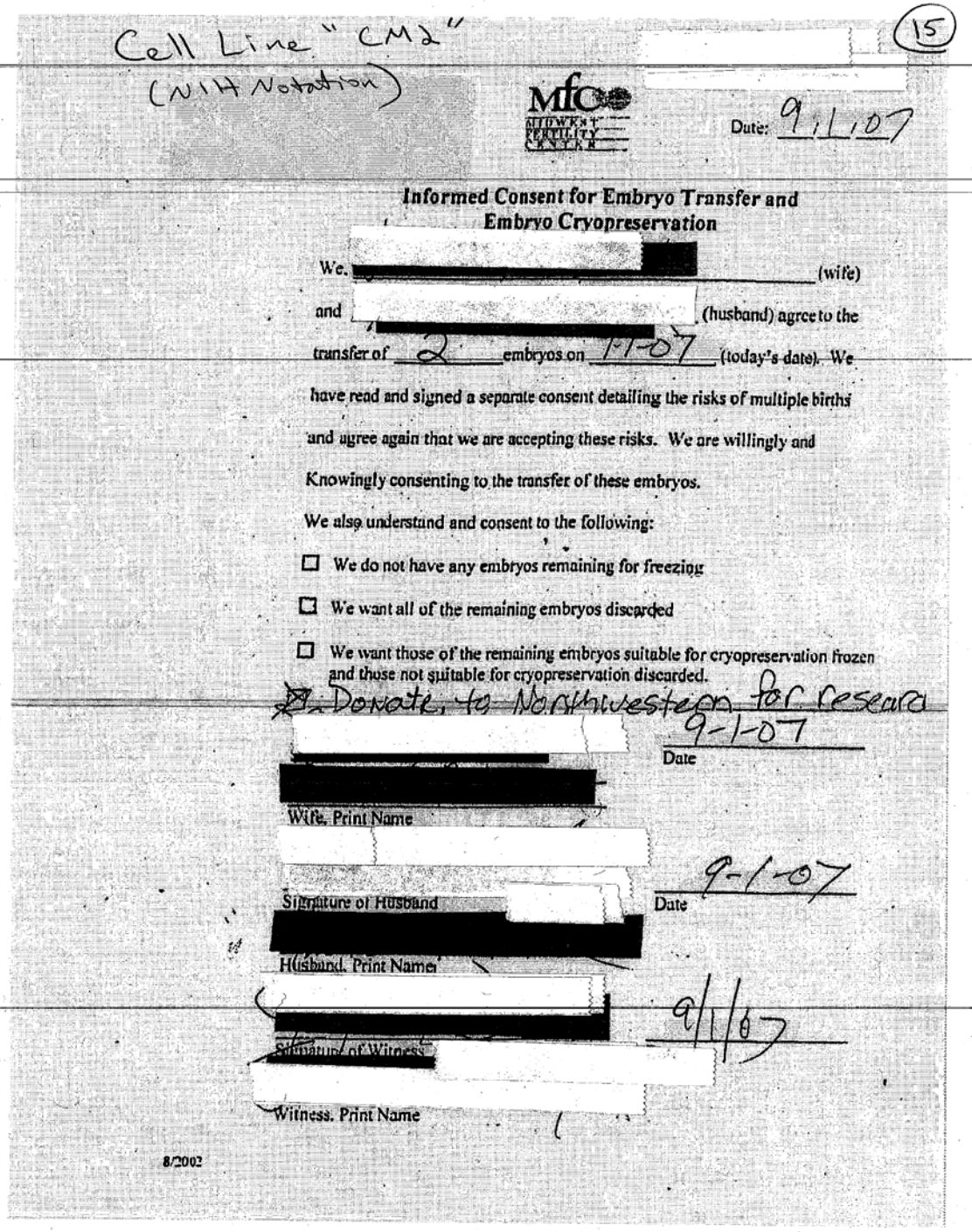
Husband's signature:
Date: March 5, 2007

The Third Hospital Affiliated to Guangzhou Medical University
Representative's signature: Sun Xiaofang
Date: March 5, 2007

Children's Memorial Hospital

Line "CM2"

(page 15)



Cell Line "CM2" (WITH Notation)

15

MFCC ATTOWKS FERTILITY CENTER

Date: 9.1.07

Informed Consent for Embryo Transfer and Embryo Cryopreservation

We, [redacted] (wife)

and [redacted] (husband) agree to the transfer of 2 embryos on 1-1-07 (today's date). We have read and signed a separate consent detailing the risks of multiple births and agree again that we are accepting these risks. We are willingly and Knowingly consenting to the transfer of these embryos.

We also understand and consent to the following:

☐ We do not have any embryos remaining for freezing

☐ We want all of the remaining embryos discarded

☐ We want those of the remaining embryos suitable for cryopreservation frozen and those not suitable for cryopreservation discarded.

☒ Donate to Northwestern for research

[redacted] 9-1-07
Date

[redacted]
Wife, Print Name

[redacted] 9-1-07
Signature of Husband Date

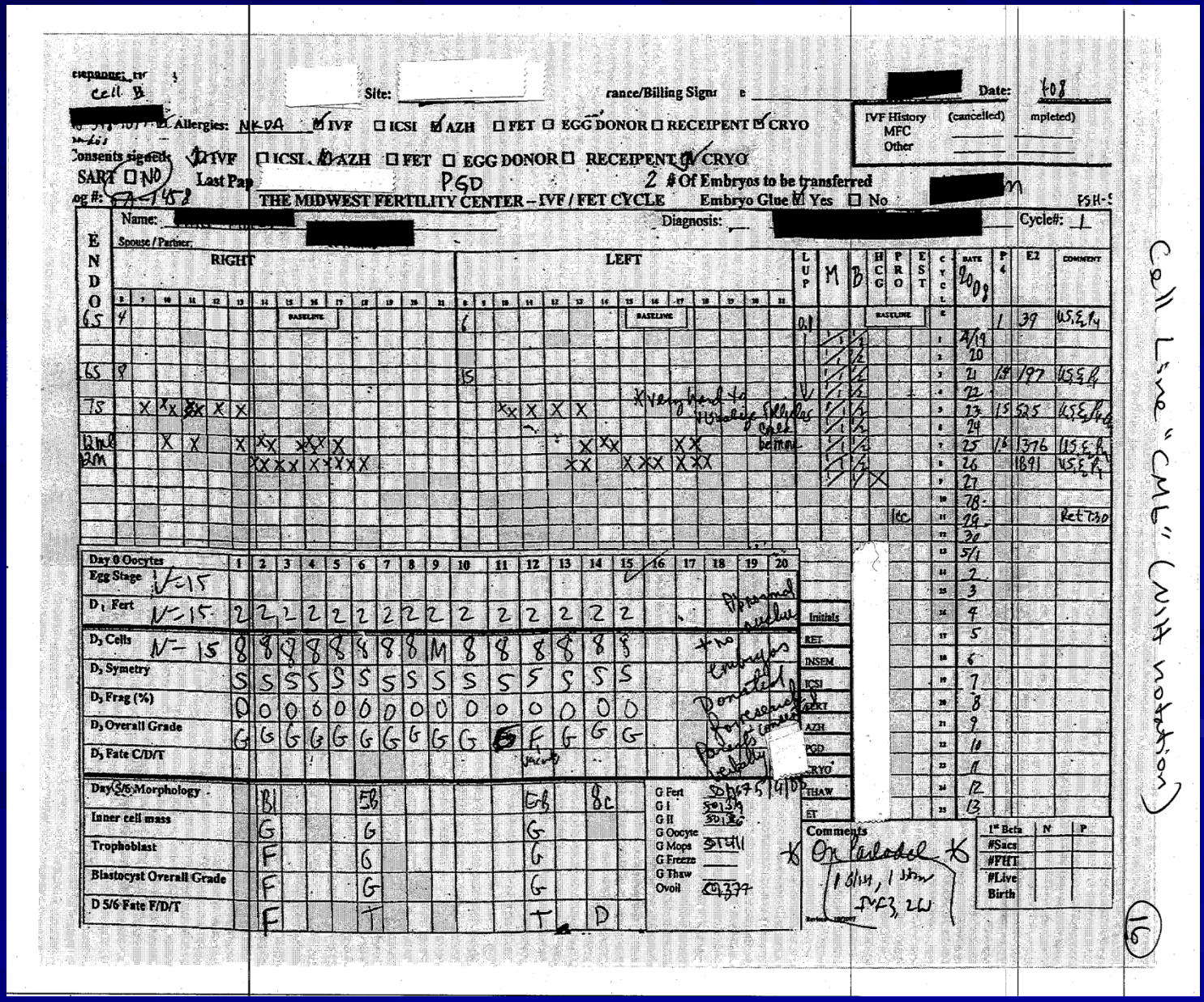
[redacted]
Husband, Print Name

[redacted] 9/1/07
Signature of Witness

[redacted]
Witness, Print Name

8/2002

Children's Memorial Hospital - Cell Line "CM6" (page 16)



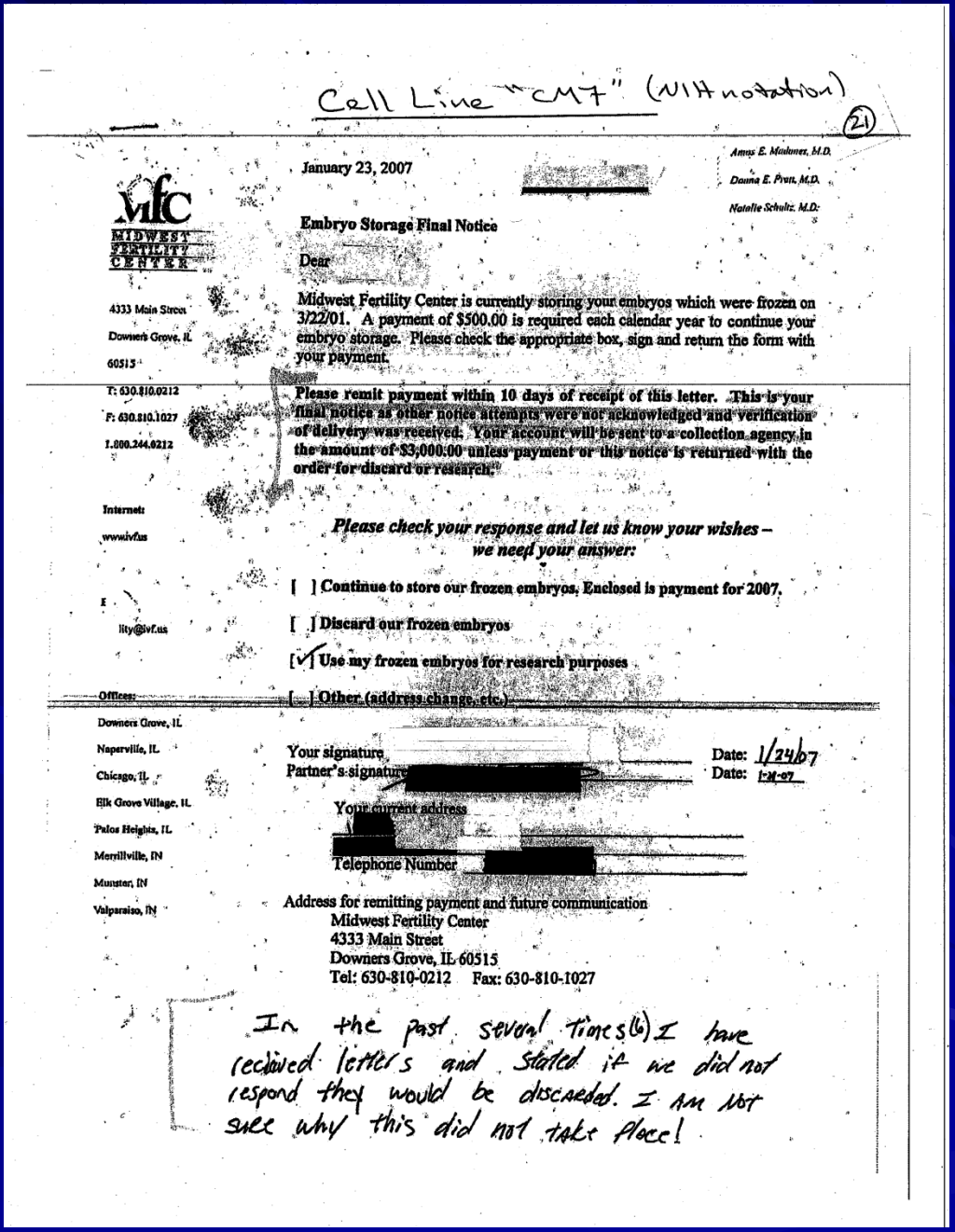
THE MIDWEST FERTILITY CENTER – IVF / FET CYCLE

Cell Line "CM6" (NIH notation)

Children's Memorial Hospital

Cell Line "CM7"

(page 21)



Cell Line "CM7" (WITH notation)

(21)

Midwest Fertility Center
4333 Main Street
Downers Grove, IL
60515
T: 630.810.0212
F: 630.810.1027
1.800.244.0212
Internet:
www.ivf.us
E
lity@ivf.us

Offices:
Downers Grove, IL
Naperville, IL
Chicago, IL
Elk Grove Village, IL
Palos Heights, IL
Merrillville, IN
Munster, IN
Valparaiso, IN

Amos E. Madanes, M.D.
Donna E. Prum, M.D.
Natalie Schultz, M.D.

January 23, 2007

[redacted]

Embryo Storage Final Notice

Dear [redacted]

Midwest Fertility Center is currently storing your embryos which were frozen on 3/22/01. A payment of $500.00 is required each calendar year to continue your embryo storage. Please check the appropriate box, sign and return the form with your payment.

Please remit payment within 10 days of receipt of this letter. This is your final notice as other notice attempts were not acknowledged and verification of delivery was received. Your account will be sent to a collection agency in the amount of $3,000.00 unless payment or this notice is returned with the order for discard or research.

Please check your response and let us know your wishes – we need your answer:

[ ] **Continue to store our frozen embryos. Enclosed is payment for 2007.**

[ ] **Discard our frozen embryos**

[✓] **Use my frozen embryos for research purposes**

[ ] **Other (address change, etc.)**

Your signature [redacted] Date: 1/24/07
Partner's signature [redacted] Date: 1-24-07

Your current address
[redacted]

Telephone Number [redacted]

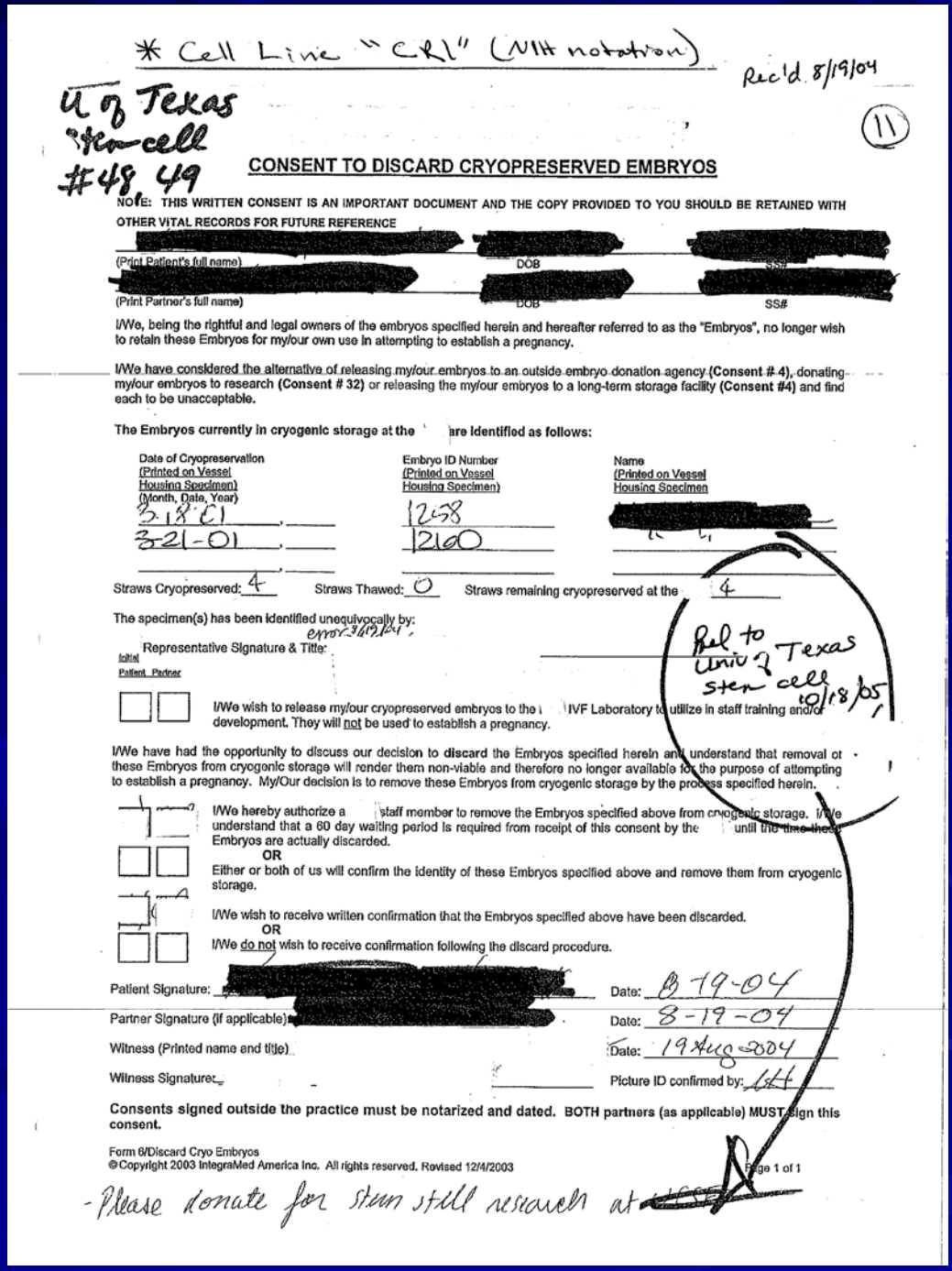
Address for remitting payment and future communication
Midwest Fertility Center
4333 Main Street
Downers Grove, IL 60515
Tel: 630-810-0212 Fax: 630-810-1027

In the past several times (6) I have received letters and stated if we did not respond they would be discarded. I am not sure why this did not take place!

University of Texas

Cell Line "CR1"

(page 11;
1 of 2 pages)



* Cell Line "CR1" (NIH notation)

Rec'd 8/19/04

(11)

U of Texas stem cell #48, 49

CONSENT TO DISCARD CRYOPRESERVED EMBRYOS

NOTE: THIS WRITTEN CONSENT IS AN IMPORTANT DOCUMENT AND THE COPY PROVIDED TO YOU SHOULD BE RETAINED WITH OTHER VITAL RECORDS FOR FUTURE REFERENCE

[redacted] DOB [redacted] SS#

(Print Patient's full name)

[redacted] DOB [redacted] SS#

(Print Partner's full name)

I/We, being the rightful and legal owners of the embryos specified herein and hereafter referred to as the "Embryos", no longer wish to retain these Embryos for my/our own use in attempting to establish a pregnancy.

I/We have considered the alternative of releasing my/our embryos to an outside embryo donation agency **(Consent # 4)**, donating my/our embryos to research **(Consent # 32)** or releasing the my/our embryos to a long-term storage facility **(Consent #4)** and find each to be unacceptable.

The Embryos currently in cryogenic storage at the are identified as follows:

Date of Cryopreservation (Printed on Vessel Housing Specimen) (Month, Date, Year)	Embryo ID Number (Printed on Vessel Housing Specimen)	Name (Printed on Vessel Housing Specimen
3.18.01	1258	[redacted]
3-21-01	1260	

Straws Cryopreserved: 4 Straws Thawed: 0 Straws remaining cryopreserved at the 4

The specimen(s) has been identified unequivocally by:

Representative Signature & Title:

Initial
Patient Partner

☐☐ I/We wish to release my/our cryopreserved embryos to the IVF Laboratory to utilize in staff training and/or development. They will not be used to establish a pregnancy.

Rel to Univ of Texas stem cell 10/18/05

I/We have had the opportunity to discuss our decision to **discard** the Embryos specified herein and understand that removal of these Embryos from cryogenic storage will render them non-viable and therefore no longer available for the purpose of attempting to establish a pregnancy. My/Our decision is to remove these Embryos from cryogenic storage by the process specified herein.

☐ I/We hereby authorize a staff member to remove the Embryos specified above from cryogenic storage. I/We understand that a 60 day waiting period is required from receipt of this consent by the until the time the Embryos are actually discarded.

OR

☐☐ Either or both of us will confirm the identity of these Embryos specified above and remove them from cryogenic storage.

☐ I/We wish to receive written confirmation that the Embryos specified above have been discarded.

OR

☐☐ I/We do not wish to receive confirmation following the discard procedure.

Patient Signature: [redacted] Date: 8-19-04

Partner Signature (if applicable): [redacted] Date: 8-19-04

Witness (Printed name and title) Date: 19 Aug 2004

Witness Signature: Picture ID confirmed by:

Consents signed outside the practice must be notarized and dated. BOTH partners (as applicable) MUST sign this consent.

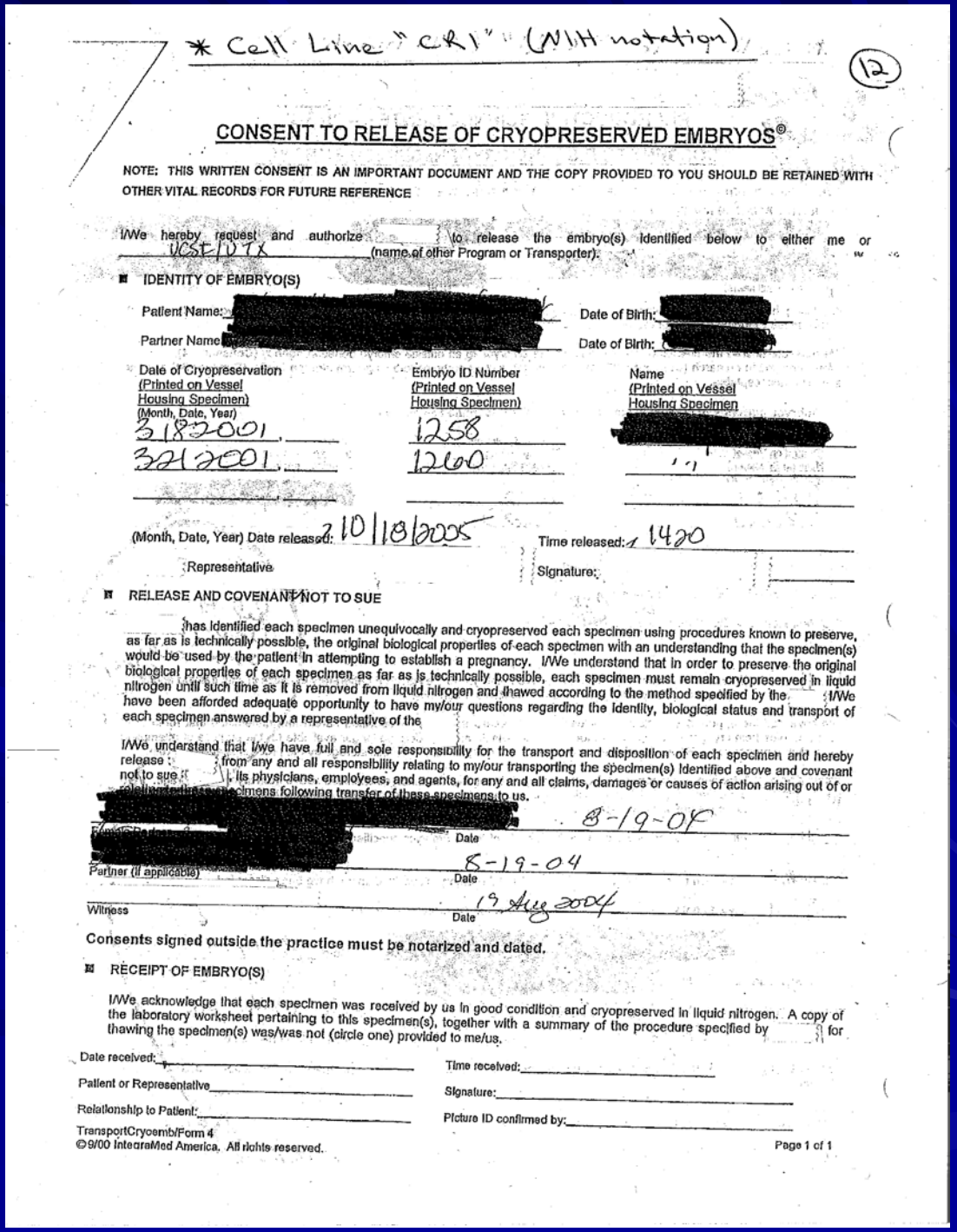
Form 6/Discard Cryo Embryos

- Please donate for stem still research at [redacted]

University of Texas

Cell Line “CR1”

(page 12;
2 of 2 pages)



* Cell Line "CR1" (WIH notation)

(12)

CONSENT TO RELEASE OF CRYOPRESERVED EMBRYOS©

NOTE: THIS WRITTEN CONSENT IS AN IMPORTANT DOCUMENT AND THE COPY PROVIDED TO YOU SHOULD BE RETAINED WITH OTHER VITAL RECORDS FOR FUTURE REFERENCE

I/We hereby request and authorize [redacted] to release the embryo(s) identified below to either me or UCSF/UTx (name of other Program or Transporter):

■ IDENTITY OF EMBRYO(S)

Patient Name: [redacted] Date of Birth: [redacted]

Partner Name [redacted] Date of Birth: [redacted]

Date of Cryopreservation (Printed on Vessel Housing Specimen) (Month, Date, Year)	Embryo ID Number (Printed on Vessel Housing Specimen)	Name (Printed on Vessel Housing Specimen
3/8/2001	1258	[redacted]
3/8/2001	1260	"

(Month, Date, Year) Date released: 10/18/2005 Time released: 1420

Representative Signature:

■ RELEASE AND COVENANT NOT TO SUE

[redacted] has identified each specimen unequivocally and cryopreserved each specimen using procedures known to preserve, as far as is technically possible, the original biological properties of each specimen with an understanding that the specimen(s) would be used by the patient in attempting to establish a pregnancy. I/We understand that in order to preserve the original biological properties of each specimen as far as is technically possible, each specimen must remain cryopreserved in liquid nitrogen until such time as it is removed from liquid nitrogen and thawed according to the method specified by the [redacted]. I/We have been afforded adequate opportunity to have my/our questions regarding the identity, biological status and transport of each specimen answered by a representative of the [redacted].

I/We understand that I/we have full and sole responsibility for the transport and disposition of each specimen and hereby release [redacted] from any and all responsibility relating to my/our transporting the specimen(s) identified above and covenant not to sue [redacted], its physicians, employees, and agents, for any and all claims, damages or causes of action arising out of or relating to the specimens following transfer of these specimens to us.

[redacted] Date 8-19-04

Partner (if applicable) Date 8-19-04

Witness Date 19 Aug 2004

Consents signed outside the practice must be notarized and dated.

■ RECEIPT OF EMBRYO(S)

I/We acknowledge that each specimen was received by us in good condition and cryopreserved in liquid nitrogen. A copy of the laboratory worksheet pertaining to this specimen(s), together with a summary of the procedure specified by [redacted] for thawing the specimen(s) was/was not (circle one) provided to me/us.

Date received: Time received:

Patient or Representative Signature:

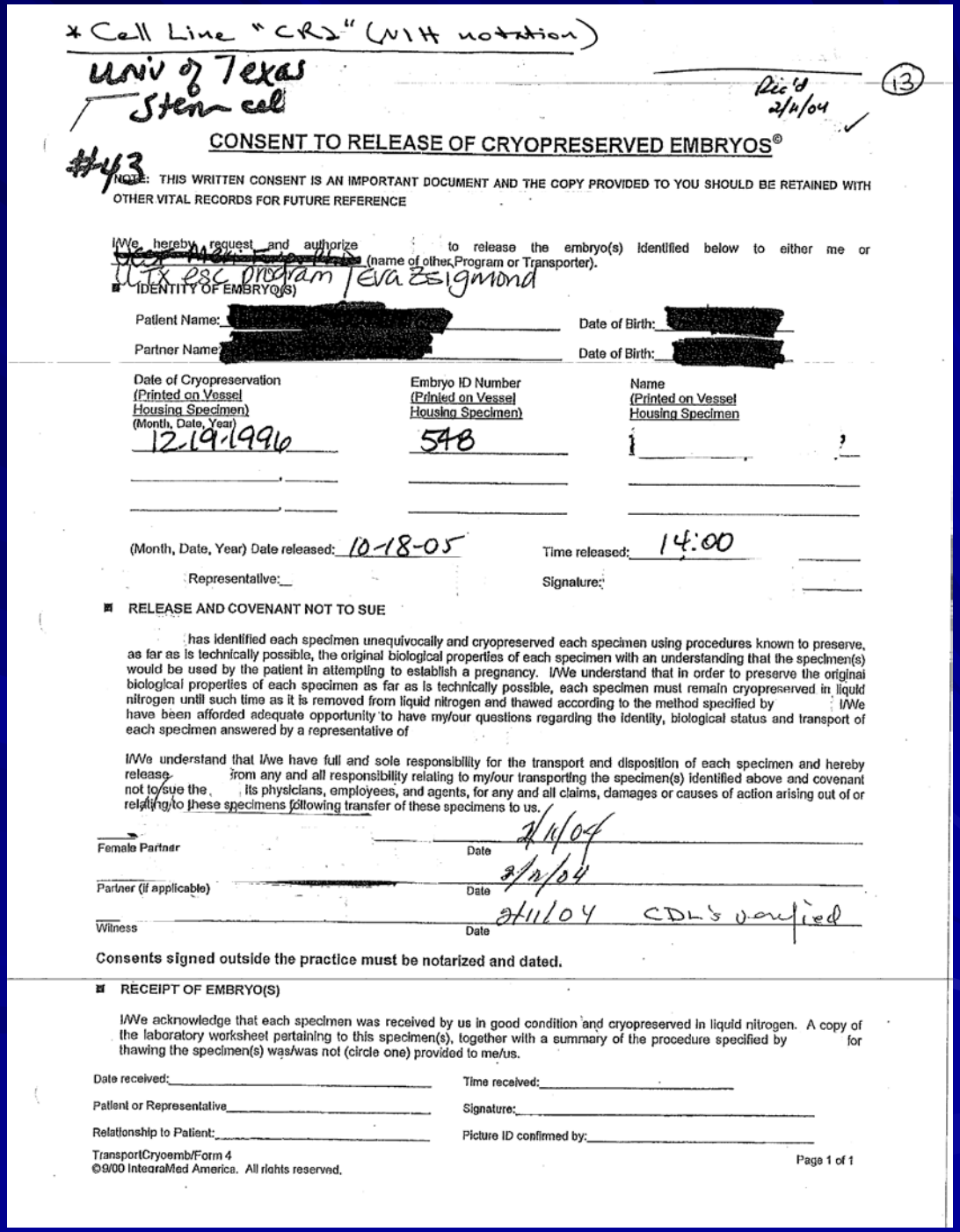
Relationship to Patient: Picture ID confirmed by:

TransportCryoemb/Form 4

University of Texas

Cell Line “CR2”

(page 13)



* Cell Line "CR2" (WITH notation)

Univ of Texas Stem cell

Rec'd 2/4/04

(13)

CONSENT TO RELEASE OF CRYOPRESERVED EMBRYOS©

#43

NOTE: THIS WRITTEN CONSENT IS AN IMPORTANT DOCUMENT AND THE COPY PROVIDED TO YOU SHOULD BE RETAINED WITH OTHER VITAL RECORDS FOR FUTURE REFERENCE

I/We hereby request and authorize to release the embryo(s) identified below to either me or (name of other Program or Transporter).

U Tx esc program / Eva Seigmond

■ IDENTITY OF EMBRYO(S)

Patient Name: [redacted] Date of Birth: [redacted]

Partner Name: [redacted] Date of Birth: [redacted]

Date of Cryopreservation (Printed on Vessel Housing Specimen) (Month, Date, Year)	Embryo ID Number (Printed on Vessel Housing Specimen)	Name (Printed on Vessel Housing Specimen
12-19-1996	548	

(Month, Date, Year) Date released: 10-18-05 Time released: 14:00

Representative: Signature:

■ RELEASE AND COVENANT NOT TO SUE

has identified each specimen unequivocally and cryopreserved each specimen using procedures known to preserve, as far as is technically possible, the original biological properties of each specimen with an understanding that the specimen(s) would be used by the patient in attempting to establish a pregnancy. I/We understand that in order to preserve the original biological properties of each specimen as far as is technically possible, each specimen must remain cryopreserved in liquid nitrogen until such time as it is removed from liquid nitrogen and thawed according to the method specified by I/We have been afforded adequate opportunity to have my/our questions regarding the identity, biological status and transport of each specimen answered by a representative of

I/We understand that I/we have full and sole responsibility for the transport and disposition of each specimen and hereby release from any and all responsibility relating to my/our transporting the specimen(s) identified above and covenant not to sue the its physicians, employees, and agents, for any and all claims, damages or causes of action arising out of or relating to these specimens following transfer of these specimens to us.

Female Partner — Date 2/4/04

Partner (if applicable) [redacted] — Date 2/2/04

Witness — Date 2/11/04 CDL's verified

Consents signed outside the practice must be notarized and dated.

■ RECEIPT OF EMBRYO(S)

I/We acknowledge that each specimen was received by us in good condition and cryopreserved in liquid nitrogen. A copy of the laboratory worksheet pertaining to this specimen(s), together with a summary of the procedure specified by for thawing the specimen(s) was/was not (circle one) provided to me/us.

Date received: Time received:

Patient or Representative Signature:

Relationship to Patient: Picture ID confirmed by:

TransportCryoemb/Form 4