

# 2006 Guidelines for gamete and embryo donation

*The Practice Committee of the American Society for Reproductive Medicine and the Practice Committee of the Society for Assisted Reproductive Technology*

Birmingham, Alabama

The 2006 *Guidelines for Gamete and Embryo Donation* provide the latest recommendations for evaluation of potential sperm, oocyte, and embryo donors, incorporating recent information about optimal screening and testing for sexually transmitted infections, genetic diseases, and psychological assessments. This revised American Society for Reproductive Medicine Practice Committee document incorporates recent information from the US Centers for Disease Control and Prevention, the US Food and Drug Administration, and the American Association of Tissue Banks, with which all programs offering gamete and embryo donation services must be thoroughly familiar. (*Fertil Steril*® 2006;86(Suppl 4):S38–50. ©2006 by American Society for Reproductive Medicine.)

## 2006 GUIDELINES FOR GAMETE AND EMBRYO DONATION

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## 2006 GUIDELINES FOR GAMETE AND EMBRYO DONATION: A PRACTICE COMMITTEE REPORT Guidelines and Minimum Standards

*The American Society for Reproductive Medicine Birmingham, Alabama*

The 2006 *Guidelines for Gamete and Embryo Donation* provide the latest recommendations for evaluation of potential sperm, oocyte, and embryo donors, incorporating recent information about optimal screening and testing for sexually transmitted infections (STIs), genetic diseases, and psychological assessments. The current document represents an effort to make the screening guidelines for embryos and gametes more consistent and incorporates recent information from the US Centers for Disease Control and Prevention (CDC), US Food and Drug Administration (FDA), and American Association of Tissue Banks (AATB). The risks of STIs differ among sperm, oocytes, and embryos, and leukocyte-rich semen donation poses unique risks, which are reflected in the recommendations. These guidelines use terminology from the federal agencies in addition to the AATB. In that context, the term “screening” refers to specific historical factors that place an individual at high risk for a given disease, such as human immunodeficiency virus

### Guideline

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(HIV) and transmissible spongiform encephalopathy (TSE), or Creutzfeldt-Jakob disease (CJD). “Testing” refers to specific laboratory studies such as serologic tests. This distinction between screening and testing is made consistently within the document. The guidelines for the screening and testing of gamete and embryo donors are intended for potential donors in the United States. Prevalence of STIs and genetic diseases may vary in other locales, and these guidelines may not be appropriate for other countries or individuals who come to the United States from other countries.

The promulgation of FDA regulations has added considerable oversight to gamete and embryo donation, including mandatory registration of all assisted reproductive technology (ART) programs with the federal government, federal inspections of programs that are performing donation, required documentation, and written protocols attendant to donor screening, testing, selection, rejection, and follow-up. Complete records of all donor cycles, including documentation of adherence to FDA regulations, must be made available to FDA inspectors at their request. Federal regulations may be viewed at the following Web sites:

<http://www.fda.gov/cber/rules/suitdonor.pdf>

<http://www.fda.gov/cber/rules/gtp.pdf>

## GUIDELINES FOR SPERM DONATION

*The American Society for Reproductive Medicine Birmingham, Alabama*

### I. Introduction

Therapeutic donor insemination (TDI) may be employed to achieve conception where appropriate indications exist. The clinical procedures should take into account the age and health status of the recipient. The US Food and Drug Administration (FDA) has published requirements for the screening and testing of donors of human cells, tissues, and cellular and tissue-based products (HCT/Ps), which are included here. These are the minimum requirements mandated

by the federal government. In some instances, the federal requirements may be less rigorous than those in the state in which an individual practice is located, or than what is recommended by the American Society for Reproductive Medicine (ASRM) and the Society for Assisted Reproductive Technology (SART). It is the responsibility of all clinics to know the regulations of their individual states and local municipalities and to comply with those standards.

## II. Indications for Considering TDI

- A. The male partner has azoospermia, severe oligospermia, or other significant sperm or seminal fluid abnormalities.
- B. The male partner has ejaculatory dysfunction.
- C. The male partner demonstrates significant male factor infertility (i.e., significant oligoasthenospermia or prior failure to fertilize after insemination in vitro, and intracytoplasmic sperm injection (ICSI) is not elected or feasible).
- D. The male partner has a significant genetic defect or the couple previously has produced an offspring affected by a condition for which carrier status cannot be determined.
- E. The male partner has a sexually transmissible infection that cannot be eradicated.
- F. The female partner is Rh-negative and severely Rh-immunized, and the male partner is Rh-positive.
- G. Females without male partners.

## III. Psychological Consultation and Consent

The decision to proceed with donor insemination is complex, and patients and their partners may benefit from psychological counseling to aid in this decision. The physician should offer psychological counseling by a qualified mental health professional to all couples and should require psychological consultation for couples in whom factors appear to warrant further evaluation.

## IV. Evaluation of the Male Partner

- A. The male partner in any couple that requests TDI should have completed an appropriate clinical evaluation. Medical records should be reviewed before performing the insemination procedure. If appropriate, alternative treatments should be discussed with the couple.
- B. Human immunodeficiency virus (HIV) testing of the male partner is recommended strongly to address potential medical/legal issues that could arise if his partner seroconverts during or after TDI. In addition, if the male partner is HIV infected, he should be referred to an appropriate infectious disease unit for counseling on safe sex practices for preventing HIV transmission, on treatment options, and on other issues concerning HIV disease. A positive HIV test result for the male partner should not be used as an exclusionary criterion for treatment of a couple with TDI, provided that the semen to be used derives from an HIV-negative donor. Current FDA

guidelines do not entirely preclude the use of an HIV-positive directed donor. However, in the opinion of the ASRM, HIV-positive directed donors should not be used, because the risk of viral transmission cannot be eliminated completely.

- C. Testing for other STIs similar to that recommended for the female partner is encouraged.

## V. Evaluation of the Female Recipient

- A. Routine medical and reproductive history should be obtained according to the standards that are applied to women anticipating pregnancy. Abnormalities detected from history or physical examination may require more detailed evaluation and treatment before proceeding with insemination.
- B. A complete general physical examination should be performed, including a pelvic examination.
- C. Standard preconception screening, testing and counseling:
  - 1. Recommended tests include:
    - a. Blood type, Rh factor, and antibody screen.
    - b. Rubella and varicella titers. Vaccination should be offered if the individual is not immune to either virus.
    - c. *Neisseria gonorrhoeae* and *Chlamydia trachomatis*.
    - d. HIV-1 and -2 testing should be performed to address potential medical/legal complications that could arise if the recipient seroconverts during or after treatment. In addition, if the female recipient is found to be HIV infected before treatment, she should be referred to an appropriate infectious disease unit for counseling on issues concerning HIV disease, including reproductive issues such as safe sex practices for preventing HIV transmission to uninfected partners and treatment options to reduce the probability of transmission to her child. A positive HIV-1 or -2 test of the female recipient should not be used as an exclusionary criterion for treatment with TDI as long as the couple makes an informed decision following counseling and agrees to comply with recommended clinical management for the positive HIV status during pregnancy.
    - e. Serologic test for syphilis.
    - f. Hepatitis B surface antigen.
    - g. Hepatitis B core antibody (IgG and IgM).
    - h. Hepatitis C antibody.
    - i. Cytomegalovirus (CMV) antibody (IgG and IgM). For women who test positive for active infection (positive urine or throat culture *or* paired serum samples demonstrating a fourfold rise in IgG antibody and IgM antibody at least 30% of the IgG level), attempts to conceive should be postponed until they no longer exhibit active infection, owing to the risk of transmitting the infection to their fetus and the serious potential consequences of fetal CMV infection.

- j. Human T-cell lymphotropic virus (HTLV) type I and II may also be obtained at the discretion of the clinician in the appropriate clinical setting.
2. Recipients should be screened for possible exposure to transmissible spongiform encephalopathies (TSE; see <http://www.fda.gov/cber/gdlns/cjdvcjd0602.htm>).

D. Documentation and timing of ovulation:

Women with regular cyclic menses and minimal symptoms are assumed to be ovulating. When doubt exists, an index of ovulation, such as serum progesterone level, basal body temperature, luteinizing hormone (LH) surge detection, and ultrasound monitoring of follicular maturation, may be used to document ovulation. Appropriate timing of the insemination procedure optimizes chances for success.

E. Evaluation for possible tubal or peritoneal abnormalities  
Patients who fail to conceive after four to six well timed inseminations may be candidates for hysterosalpingography (HSG), laparoscopy, or other appropriate tests to detect possible causes for their failure to conceive. Pre-treatment HSG or laparoscopy may be indicated by the history and/or physical findings.

F. Informed consent should be obtained from the patient (and her partner, if applicable).

## VI. Donors

### A. Selection of donor

1. The main qualities to seek in selecting a donor for TDI are an assurance of good health status and the absence of genetic abnormalities.
2. The donor should be of legal age and, ideally, less than 40 years of age, because increased male age is associated with a progressive increase in the prevalence of aneuploid sperm.
3. Selection of donors with established fertility is desirable but not required.
4. Psychological evaluation and counseling by a qualified mental health professional is recommended strongly for all sperm donors. Psychological consultation should be required for individuals in whom there appear to be factors that warrant further evaluation. In cases of directed donation, psychological evaluation and counseling are recommended strongly for the donor and his partner, as well as for the recipient female and her partner, if applicable. The potential impact of the relationship between the donor and recipient should be explored. The psychological assessment should also address the potential psychological risks and evaluate for evidence of coercion (financial or emotional). It is important to ascertain whether the donor is well informed about the extent to which information about him might be disclosed and about any plans that may exist relating to future contact.

5. No owner, operator, laboratory director, or employee of a facility performing TDI may serve as a donor in that practice.
6. Neither the patient's physician nor the individual performing the actual insemination can be the sperm donor.

### B. Screening and testing of donors

#### 1. Semen testing

- a. It is suggested that several samples be examined (each after a 2- to 5-day abstinence interval) before proceeding with a more extensive evaluation.
- b. The sample should be examined within 1 to 2 hours after ejaculation into a sterile container. The criteria used to judge the normality of the sample can vary among laboratories. There are no uniformly accepted standards, but, in general, the minimum criteria for normal semen quality can be applied (See *WHO Laboratory Manual for the Examination of Human Semen and Sperm-Cervical Mucus Interaction, 4th Edition*, New York: Cambridge University Press, 1999).

#### 2. Genetic evaluation

Genetic screening for heritable diseases should be performed in potential sperm donors. Testing for cystic fibrosis carrier status should be performed on all donors. Other genetic testing should be performed, as indicated by the donor's ethnic background in accordance with current recommendations, after obtaining a proper family history. Some institutions perform chromosomal analyses on all donors, but such evaluation is not required. (See Appendix A for further details regarding genetic screening and testing.)

#### 3. Medical history

- a. Donors should be healthy and give no history to suggest hereditary disease.
- b. A complete personal and sexual history should be obtained to exclude as donors individuals who might be at high risk for HIV, STIs, or other infections that might be transmissible via gamete donation. Prospective sperm donors with any of the following factors should not be accepted:
  - i. Men with a history of sex with another man in the preceding 5 years.
  - ii. Men who engage in casual sexual relations frequently with different partners.
  - iii. Men who have injected drugs for nonmedical reasons in the preceding 5 years, including intravenous, intramuscular, and subcutaneous injections.
  - iv. Men with hemophilia or other coagulation disorders who have received human-derived clotting factor concentrates.
  - v. Men who have had sex in exchange for money or drugs in the preceding 5 years.

- vi. Men who have had sex in the preceding 12 months with any person meeting any of the criteria described immediately above, or with any person suspected of having HIV, hepatitis B, or hepatitis C infection.
  - vii. Men who have been exposed within the last 12 months, through percutaneous inoculation or contact with an open wound, nonintact skin, or mucous membrane, to blood that is known or suspected to be infected with HIV, hepatitis B, and/or hepatitis C virus.
  - viii. Men who have had close contact (e.g., living in the same household wherein sharing of kitchen and bathroom facilities occurs regularly) within 12 months preceding the donation with another person who has viral hepatitis.
  - ix. Men who have been incarcerated in jail (for more than 72 hours) within the previous 12 months.
    - x. Men who had or have been treated for syphilis, gonorrhea, or chlamydia, within the preceding 12 months.
    - xi. Men who have undergone acupuncture, body piercing, and/or tattooing procedures within the preceding 12 months in which sterile procedures were not used or it is unclear whether sterile procedures were used.
    - xii. Men who have received smallpox vaccination (vaccinia virus) for 21 days after vaccination or until the scab separates spontaneously and physical examination confirms the absence of a scab at the vaccination site (whichever is later). The donor should be deferred for 2 months if the scab was removed before spontaneous separation. If the donor experienced complications from vaccination, he should be deferred until 14 days after complete resolution of those complications. If the donor became infected as a result of close contact with a person recently vaccinated for vaccinia, he may be considered eligible for donation if the scab spontaneously separated, if 14 days have elapsed since resolution of all the vaccinia-related complications, or 3 months after the scab was otherwise removed.
    - xiii. Men at risk for or having a family history of transmissible spongiform encephalopathy (TSE), such as Creutzfeldt-Jakob disease (CJD); a history of changes in cognition, speech, or gait; or history of exposure to tissues (e.g., dura mater grafts, corneal transplants) suspected of harboring a TSE. (See <http://www.fda.gov/cber/gdlns/cjdvcjd0602.htm>.)
    - xiv. Men who have had a simultaneous fever and headache or medical diagnosis of west nile virus (WNV) infection should be deferred for at least 28 days after the onset of symptoms or diagnosis or for 14 days after resolution of such symptoms (whichever is later).
    - xv. Men who are suspected to have sudden acute respiratory syndrome (SARS), have received treatment for SARS during the preceding 28 days, have had close contact with a person known or suspected to have SARS in the preceding 14 days, or have traveled to or resided in an area affected by SARS in the preceding 14 days.
    - xvi. Men who have received xenotransplants (live cells, tissues, or organs from a nonhuman animal source or human body fluids, cells, tissues, or organs that have had ex vivo contact with live nonhuman animal cells, tissues, or organs) or have been in close contact with a xenotransplant recipient.
    - xvii. Men who have received human organ or tissue transplants or treatment with human extracts.
4. Physical examination
- a. Donors should undergo a complete physical examination, including evaluation for urethral discharge, genital warts, and genital ulcers, as well as routine laboratory testing, including blood type and Rh factor, before being enlisted as donors.
  - b. Donors should have follow-up examinations every 6 months for urethral discharge, genital warts, and genital ulcers if they remain active donors. Donors should not be used if any such findings are present.
5. Laboratory testing
- There is no method to completely ensure that infectious agents will not be transmitted by TDI, but the following guidelines, in addition to adequate history taking and exclusion of individuals at high risk for HIV and other STIs, should dramatically reduce these risks. The FDA requires the following tests, using an FDA-approved method, with negative results documented prior to use of the sperm. The list of tests approved by the FDA is available at <http://www.fda.gov/cber/products/testkits.htm>.
- a. HIV-1 and -2.
  - b. Hepatitis C antibody.
  - c. Hepatitis B surface antigen.
  - d. Hepatitis B core antibody (IgG and IgM).
  - e. Serologic test for syphilis.
  - f. HTLV-1 and -2.
  - g. CMV (IgG and IgM). Men who test positive for active infection (positive urine or throat culture *or* paired serum samples demonstrating a fourfold rise in IgG antibody and IgM antibody at least 30% of the IgG level) should be excluded. Because CMV is so common, insemination with semen from a CMV-seropositive man (without active infection) is permissible when the female partner is also CMV seropositive. Although the practice is not entirely without risk, because there are many

strains of CMV and superinfection is possible, the associated risk of newborn CMV infection is approximately 1%, and such infants appear to have no significant illness or other abnormality.

- h. Semen, urinary, or urethral tests should be obtained initially for *Neisseria gonorrhoeae*. Either urethral or urinary testing for *Chlamydia trachomatis* should be performed. These tests should be repeated if clinically indicated. Donors found to be positive should be treated and retested before being reconsidered. Retesting of the donor at 6-month intervals is required as long as the donor remains active.
  - i. Abbreviated donor screening documenting no change in the donor's medical and/or social history should be performed at 6-month intervals.
  - j. Additional testing should be performed as dictated by local or state requirements.
6. Managing laboratory results:
- a. A positive test should be verified before notifying the potential donor. If a test is confirmed positive, the individual should be referred for appropriate counseling and management.
  - b. If testing is negative, semen samples may be collected and prepared for cryopreservation.
  - c. After donation, anonymous donor specimens must be quarantined for a minimum of 180 days. The donor must be retested (see section VI.B.5, immediately preceding) after the required quarantine interval, and specimens may be released only if the results of repeat testing are negative.
  - d. Screening and testing of donors for STIs and genetic risk factors may change over time as tests improve and new tests become available. Therefore, samples of sperm that are cryopreserved and stored for periods of time may not meet existing testing standards at the time they are released for use. In such instances, every effort should be made to have the donor tested in accordance with current standards. In situations where the donor is not available or refuses such additional testing, the sample(s) may be released provided that the recipient is informed that the specimen does not meet current screening and testing guidelines, is informed of what tests have not been performed, and is counseled regarding the clinical implications of the missing information.
7. Directed donation

Directed (nonanonymous or known) donation is acceptable if all parties agree. Directed donors must undergo the same screening and testing as anonymous donors. Directed donors who test positive or demonstrate a risk factor for a relevant communicable disease are not prohibited from use according to current FDA rules, provided that the tissue is labeled to indicate any associated increased risks and that recipients are informed and counseled appropriately. Di-

rected-donor specimens also are exempt from quarantine under the current FDA guidelines, which require only retesting as described above (see section VI.B.5), within 7 days before donation. However, in the opinion of the ASRM, directed-donor specimens should be treated in the same manner as anonymous-donor specimens; results of screening or testing that would exclude an anonymous donor also should exclude a directed donor, and directed-donor specimens should be quarantined and released in the same manner required for anonymous-donor specimens (see sections VI.B.1–6).

8. Sexually intimate couples

Although there is no FDA or legal requirement for viral testing of sexually intimate partners undergoing fertility treatment, such testing can help to ensure that appropriate precautions are taken to minimize risk of viral transmission to partners and offspring. Couples in which one or both partners test positive for HIV, HBV, or HCV should be treated by fertility centers having the appropriate laboratory resources.

9. Use of fresh semen

In the opinion of the ASRM, the use of fresh semen can be justified only for sexually intimate couples. It is possible for HIV and other infectious organisms to be transmitted by fresh donor semen before the donor has become seropositive. Consequently, the potential for transmission of infections by fresh semen cannot be eliminated. In the opinion of the ASRM, all frozen specimens should be quarantined for a minimum of 180 days, with the donor then retested as described above (see section VI.B.5) and demonstrated seronegative before the specimen is released.

C. Management of donors

1. Monitoring health status

The single most important method for reducing the risk of transmitting infectious agents to women during insemination is to carefully screen and test the potential donors and to develop an ongoing procedure for monitoring their health status.

2. Payment to donors

Payment to donors varies from area to area but should not be such that the monetary incentive is the primary motivation for donating sperm. However, the donor may be compensated for his time and expenses.

3. Limitations to donor use

Institutions, clinics and sperm banks should maintain sufficient records to allow a limit to be set for the number of pregnancies for which a given donor is responsible. It is difficult to provide a precise number of times that a given donor can be used because one must take into consideration the population base from which the donor is selected and the geographic area that may be served by a given donor. It has been suggested that in a population

of 800,000, limiting a single donor to no more than 25 births would avoid any significant increased risk of inadvertent consanguineous conception. This suggestion may require modification if the population using donor insemination represents an isolated subgroup or if the specimens are distributed over a wide geographic area.

#### 4. Consent

It is essential for the donor to sign a consent form, which should include a firm denial of having any recognized risk factors for STIs and genetic diseases. It is recommended that the donor acknowledge in the consent form his responsibility to notify the donor program of any changes in his health or risk factor status.

#### 5. Record keeping

It is essential to maintain permanent records about each donor's initial selection process and subsequent follow-up evaluations. To the extent possible, clinical outcome should be recorded for each insemination cycle. A mechanism must exist to maintain these records as a future medical resource for any offspring produced.

#### 6. Protection of confidentiality

Individuals participating in donor programs should be assured that their confidentiality will be protected insofar as federal and local statutes permit. Medical records detailing the donation should be maintained as stipulated by federal and local requirements.

### VII. Choosing Donor Characteristics

There are several methods for matching the male partner with the donor. The couple should be encouraged to list the characteristics that they desire in a prospective donor, including race and/or ethnic group, height, body build, complexion, eye color, and hair color and texture. Consideration should be given to blood type and Rh factor, particularly for Rh-negative recipients. If the use of donor sperm creates the potential for Rh incompatibility, recipients should be informed of the obstetric implications of the condition.

### GUIDELINES FOR OOCYTE DONATION

*The American Society for Reproductive Medicine Birmingham, Alabama*

#### I. Oocyte Donation

Oocyte donation requires superovulation with monitoring and oocyte recovery, which present significant inconvenience as well as discomfort and risks to the donor.

#### II. Indications for Considering the Use of Donor Oocytes

- A. Women with hypergonadotropic hypogonadism.
- B. Women of advanced reproductive age.
- C. Women who have diminished ovarian reserve.

- D. Women who are known to be affected by or known to be the carrier of a significant genetic defect or who have a family history of a condition for which carrier status cannot be determined.
- E. Women with poor oocyte and/or embryo quality or multiple failures during prior attempts to conceive via assisted reproductive technologies.

### III. Psychological Consultation and Consent

The decision to proceed with donated oocytes is complex, and patients may benefit from psychological counseling to aid in this decision. The physician should offer psychological counseling by a qualified mental health professional to all couples and should require psychological consultation for couples in whom there appear to be factors that warrant further evaluation.

### IV. Evaluation of the Oocyte Recipient

#### A. Medical and reproductive history

Routine medical and reproductive histories should be obtained according to the standards that are applied to women anticipating pregnancy. Reproductive abnormalities detected from history or physical examination may require more detailed evaluation and treatment before donor oocytes are used.

#### B. A complete general physical examination should be performed, including a pelvic examination.

#### C. Assessment of the uterine cavity

Hysterosalpingography (HSG), saline infusion ultrasound, or another suitable procedure should be performed to detect any significant uterine abnormality.

#### D. Standard preconception testing and counseling

There are no federal guidelines for testing oocyte recipients. The recommended tests include:

1. Blood type, Rh factor, and antibody screen.
2. Rubella and varicella titers. Recipients should be offered immunization if nonimmune.
3. HIV-1 and -2 testing to address potential medical/legal complications that could arise if the recipient seroconverts during or after treatment. In addition, if the female recipient is found to be HIV infected before treatment, she should be referred to an appropriate infectious disease unit for counseling on issues concerning HIV disease, including reproductive issues such as safe sex practices for preventing HIV transmission to uninfected partners and treatment options to reduce the probability of transmission to her child; counseling should be documented in the medical record. A positive HIV-1 or -2 test of the female recipient should not be used as an exclusionary criterion for treatment, provided that the couple makes an informed decision after counseling and agrees to comply with recommended clinical management for the positive HIV state.
4. Serologic test for syphilis.

5. Hepatitis B surface antigen.
6. Hepatitis B core antibody (IgG and IgM).
7. Hepatitis C antibody.
8. Cervical cultures or urinary testing for *Neisseria gonorrhoea* and *Chlamydia trachomatis*.

## V. Evaluation of the Partner of the Oocyte Recipient

### A. Laboratory tests

Although no tests are required for the partner of the oocyte recipient, the following tests are recommended:

1. Semen analysis.
2. Blood type and Rh factor.
3. Serologic test for syphilis.
4. Hepatitis B surface antigen.
5. Hepatitis B core antibody (IgG and IgM).
6. Hepatitis C antibody.
7. HIV-1 and -2.
8. HTLV-1 and -2.
9. Appropriate genetic screening and testing based on history, in accordance with ethnic background and current recommendations (see Appendix A).

### B. Psychological consultation and consent

The decision to proceed with donated oocytes is complex, and patients may benefit from psychological counseling to aid in this decision. The physician should offer psychological counseling by a qualified mental health professional to all couples and should require psychological consultation for couples in whom there appear to be factors that warrant further evaluation.

## VI. Donors

### A. Solicitation of potential oocyte donors

Solicitation of donors should be in accordance with guidelines provided in the ASRM Ethics Committee Report on the subject (Fertil Steril 2000;74:216–20).

### B. Selection of donors

1. Anonymous versus known donors: Pragmatic considerations, such as the difficulty in recruiting suitable donors, support the use of known oocyte donors in the appropriate clinical situations.
2. Psychological evaluation and counseling by a qualified mental health professional is recommended strongly for the oocyte donor and her partner. Psychological consultation should be required for individuals in whom there appear to be factors that warrant further evaluation. In circumstances involving known donors, psychological evaluation and counseling is recommended strongly for the donor and her partner, if applicable, as well as for the recipient and her partner, if applicable. The potential impact of the relationship between the donor and recipient should be explored. The psychological assessment also should address the potential psychological risks and evaluate for evidence of coercion (financial or emotional). It is important to

ascertain whether the donor is well informed about the extent to which information about her may be disclosed and about any plans that may exist relating to future contact.

3. Oocyte donors should be of legal age, and preferably between the ages of 21 and 34.
4. Donors less than 21 years of age should have psychological evaluation by a qualified mental health professional and the decision to proceed with such a donor determined on an individual basis.
5. If a prospective donor is over 34 years of age, the age of the donor should be revealed to the recipient as part of the informed consent discussion concerning cytogenetic risks and the effect of donor age on pregnancy rates.
6. Proven fertility in the donor is desirable but not required.
7. The donor should undergo appropriate genetic evaluation based on history, in accordance with ethnic background and current guidelines. Cystic fibrosis testing should be performed on all donors. Chromosome analysis and fragile X testing are performed by some centers but are not required. (See Appendix A.)
8. Sharing of oocytes from an assisted reproduction cycle: If sharing of oocytes is contemplated, informed consent must be obtained prior to the start of the cycle of retrieval. The conditions governing the sharing of oocytes should be specified in advance, included in the informed consent, and comply with existing ASRM Ethics Committee guidelines (Fertil Steril 1998;70[Suppl 3]).
9. No owner, operator, laboratory director, or employee of a facility screening for or performing oocyte donation may serve as a donor in that practice.
10. If an agency is used to recruit oocyte donors, no individual that has a financial interest in that agency may be used as an oocyte donor.

### C. Screening and testing of oocyte donors

1. Donors should be healthy and give no history to suggest hereditary disease.
2. A complete personal and sexual history should be obtained to exclude as donors individuals who might be at high risk for HIV, STIs, or other infections that might be transmissible via gamete donation. Prospective oocyte donors with any of the following factors should not be accepted:
  - a. Women who have injected drugs for nonmedical reasons in the preceding 5 years, including intravenous, intramuscular, and subcutaneous injections.
  - b. Women who engage in casual sexual relations frequently with different partners.
  - c. Persons with hemophilia or other coagulation disorders who have received human-derived clotting factor concentrates.
  - d. Women who have had sex in exchange for money or drugs in the preceding 5 years.

- e. Women who have been exposed within the last 12 months, through percutaneous inoculation or contact with an open wound, nonintact skin, or mucous membrane, to blood that is known or suspected to be infected with HIV, hepatitis B, and/or hepatitis C virus.
- f. Women who have been incarcerated in jail (for more than 72 hours) within the previous 12 months.
- g. Women who have had close contact (e.g. living in the same household where sharing of kitchen and bathroom facilities occurs regularly) within 12 months preceding the donation with another person who has viral hepatitis.
- h. Women who have undergone acupuncture, body piercing, and/or tattooing procedures within the preceding 12 months in which sterile procedures were not used or it is unclear whether sterile procedures were used.
- i. Women who have had or have been treated for syphilis, gonorrhea, or chlamydia within the preceding 12 months.
- j. Women who have had sex in the preceding 12 months with any person meeting any of the eight criteria described immediately above or with any person suspected of having HIV, hepatitis B, or hepatitis C infection.
- k. Persons at risk for or having a family history of transmissible spongiform encephalopathy (TSE) such as Creutzfeldt-Jakob disease (CJD); a history of changes in cognition, speech, or gait; or exposure to tissues (e.g., dura mater grafts, corneal transplants) suspected of harboring TSEs. (See <http://www.fda.gov/cber/gdlns/cjdvcjd0602.htm>.)
- l. Persons who have had a simultaneous fever and headache or medical diagnosis of West Nile virus (WNV) infection should be deferred for at least 28 days after the onset of symptoms or diagnosis or 14 days after resolution of the symptoms (whichever is later).
- m. Women who are suspected to have sudden acute respiratory syndrome (SARS), have received treatment for SARS during the preceding 28 days, have had close contact with a person known or suspected to have SARS in the preceding 14 days, or have traveled to or resided in an area affected by SARS in the preceding 14 days.
- n. Persons who have received xenotransplants (live cells, tissues, or organs from a nonhuman animal source or human body fluids, cells, tissues, or organs that have had ex vivo contact with live nonhuman animal cells, tissues, or organs) or have been in close contact with a xenotransplant recipient.
- o. Women who have received human organ or tissue transplants or human extracts.
- p. Persons who have received smallpox vaccination (vaccinia virus) for 21 days after vaccination or

until the scab separates spontaneously and physical assessment confirms that there is no scab at the vaccination site (whichever is later). The donor should be deferred for 2 months if the scab was removed before spontaneous separation. If the person experienced complications from the vaccine, they should be deferred until 14 days after complete resolution of complications. If the infection was due to close contact with someone who has recently been vaccinated for vaccinia, the donor should be eligible if the scab spontaneously separated, 14 days after all the vaccinia complications have resolved, or 3 months after the scab was otherwise removed.

### 3. Laboratory testing:

There is no method to completely ensure that infectious agents will not be transmitted via oocyte donation, but the following guidelines, in addition to adequate history taking and exclusion of individuals at high risk for HIV and other STIs, should dramatically reduce these risks. The FDA requires that the following tests be performed within 30 days of oocyte collection, using an FDA-approved method, with negative results documented before use of the oocytes. The list of tests approved by the FDA is available at <http://www.fda.gov/cber/products/testkits.htm>.

- a. HIV-1 and -2.
- b. Hepatitis C antibody.
- c. Hepatitis B surface antigen.
- d. Hepatitis B core antibody (IgG and IgM).
- e. Serologic testing for syphilis.
- f. Cervical cultures or urinary testing for *Neisseria gonorrhoeae* and *Chlamydia trachomatis*.

Although not required by the FDA, recommended tests also include blood type and Rh factor. If the use of donor oocytes creates the potential for Rh incompatibility, couples should be informed about the obstetrical significance of this condition.

### D. Quarantining of oocytes

At this time, oocyte freezing cannot be performed reliably; therefore, the quarantining of oocytes is not practical. All potential recipient couples should be offered the option of cryopreserving and quarantining embryos derived from donor oocytes for 180 days, with release of embryos only after the donor has been retested with confirmed negative results (see section VI.C.3). However, couples also should be informed that embryo cryopreservation may significantly reduce implantation rates. The recipient couple should be appropriately counseled in the event of seroconversion of the oocyte donor after cryopreservation of the embryos.

### E. Payment to the donor

1. Compensation to the donor should be in compliance with the ASRM Ethics Committee report on the subject (Fertil Steril 2000;74:216–20).



2. Monetary compensation of the donor should reflect the time, inconvenience, and physical and emotional demands and risks associated with oocyte donation and should be at a level that minimizes the possibility of undue inducement of donors and the suggestion that payment is for the oocytes themselves.
  3. Financial obligations and responsibilities in the event of complications or medical expenses of a donor should be agreed upon contractually before initiation of a stimulation cycle.
  4. Payment may be prorated based on the number of steps completed in the procedure.
  5. Payment should not be predicated on clinical outcome.
- F. Multiple oocyte donations  
This subject is addressed specifically in the ASRM Practice Committee Opinion entitled “Repetitive Oocyte Donation” (Fertil Steril 2004(Suppl 1);82:S158–9).
- G. Unintended donor pregnancies  
The donor should be counseled about the possibility of unintended pregnancy and offered options for prevention.
- H. Age of the recipient  
In view of the concerns about pregnancy in women of advanced reproductive age, it is recommended that potential recipients over the age of 45 undergo thorough medical evaluation (including cardiovascular testing) and a high-risk obstetric consultation before undertaking IVF with donor oocytes.
- I. Record keeping  
It is necessary to maintain permanent records about each donor’s initial selection process and subsequent follow-up evaluations. To the extent possible, clinical outcome should be recorded for each treatment cycle. A mechanism must exist to maintain these records as a future medical resource for any offspring produced.
- J. Legal issues and informed consent
1. All individuals involved in oocyte donation should be advised explicitly of the risks and adverse effects of ovarian stimulation and retrieval, with such counseling documented by informed consent.
  2. Donors and recipients and their partners, if applicable, should execute documents that define or limit their rights and duties with regard to any offspring.
  3. Couples and donors who have legal concerns not addressed in the informed-consent process should be advised to seek legal consultation.
  4. Protection of confidentiality: Individuals participating in donor programs should be assured that their confidentiality will be protected insofar as federal and local statutes permit. Medical records detailing the donation should be maintained as stipulated by local requirements.
  5. It is recommended that the donor acknowledge in the consent form her responsibility to notify the donor program of any changes in her health or risk factor status.

## GUIDELINES FOR CRYOPRESERVED EMBRYO DONATION

*The American Society for Reproductive Medicine Birmingham, Alabama*

### Background

In the current clinical practice of ART, more embryos than can be safely transferred at one time commonly are generated. In the majority of ART practices, these embryos may be cryopreserved for later transfer. Couples who become pregnant and do not desire another pregnancy, or have other reasons for choosing not to use their embryos, may have the option of discarding these embryos or donating them to other individuals or to research. It is the purpose of this document to present guidelines for embryo donation. It should be noted that these guidelines represent minimum standards for screening, testing, and counseling of potential embryo donors and recipients. The federal government has published minimum requirements for embryo donation (see <http://www.fda.gov/cber/rules/gtp.pdf>). Some states and other localities may have laws or regulations that pertain to embryo donation that may supersede these guidelines.

### I. Guidelines for ART Practices Wishing to Offer Embryo Donation

- A. The practice should be knowledgeable in the storage, thawing, and transfer of frozen embryos.
- B. The practice may charge a professional fee to the potential recipients for embryo thawing, the embryo transfer procedure, cycle coordination and documentation, and infectious disease screening and testing of both recipients and donors. However, the selling of embryos per se is ethically unacceptable.
- C. It is acceptable for a practice or cryostorage facility to have conservatorship of embryos given up for potential embryo donation by patients whose gametes were used to generate the embryos.
- D. Embryos should be quarantined for a minimum of 6 months before the potential donors are screened and tested or retested as noted in section II, with documentation of negative results.
- E. Physicians and employees of an infertility practice should be excluded from participating in embryo donation as either donors or recipients within that practice.

### II. Embryo Donation

If donor sperm or donor oocytes were used to create the embryos, the donor gametes (both sperm and oocytes) must have met the FDA requirements and the ASRM standards for screening and testing. If donor sperm were used, the sperm should have met current FDA requirements for donation, but the female partner in such circumstances must have met all of the screening and testing requirements for oocyte donors within 30 days of collection of the oocytes. If donor oocytes

were used, the oocyte donor should have been screened already and tested according to current FDA requirements, but the male partner must have been screened and tested within 7 days of collection of the sperm sample used to create the embryos. Anonymous embryo donations in which donor oocytes were used require that the sperm sample used to create the embryos also meet the requirement for a 6-month quarantine.

The following guidelines apply to sexually intimate couples who decide to donate unused embryos that are the product of their own biological gametes.

- A. Embryo donors must provide a medical and genetic history.
- B. They should be screened for relevant risk factors for HIV, other transmissible infections and transmissible spongiform encephalopathy (TSE). (See <http://www.fda.gov/cber/gdlns/cjdvcd0602.htm>.)
- C. There is no method to ensure completely that infectious agents will not be transmitted, but the following guidelines, in addition to adequate history taking and exclusion of individuals at high risk for HIV and other transmissible infections, should dramatically reduce these risks. Couples that are geographically distant from the practice may have their blood drawn and tested at a location that is convenient to them or may opt to ship the serum to the practice for testing. The practice should determine if the cost of these tests will be absorbed by the donors themselves, the practice facilitating the embryo donation, or the potential recipients. The following tests are recommended, using an FDA-approved method, and should be performed before gamete collection or 180 days after cryopreservation of the embryos on both partners.
  1. HIV-1 and -2.
  2. Hepatitis B surface antigen.
  3. Hepatitis B core antibody (IgG and IgM).
  4. Hepatitis C antibody.
  5. Serologic test for syphilis.
  6. Cervical cultures, urinary testing, or urethral swabs for *Neisseria gonorrhoeae* and *Chlamydia trachomatis*.
  7. If not already performed, appropriate genetic screening and testing should be carried out. In addition, the male donor also should be tested for:
    - a. HTLV-1 and -2.
    - b. CMV (IgG and IgM) antibody.
- D. Often, screening and testing of the biological source of the gametes used to create the embryos in sexually intimate partners was not done and the decision to donate embryos occurred subsequent to their creation. If the decision to donate is made more than 180 days after cryopreservation of the embryos, the donors may be rescreened and tested. In this instance, the documentation that accompanies the embryos must include the following label: "Advise recipient that screening and testing of the donors were not performed at the time of cryopreser-

vation of the reproductive cells or tissue but have been performed subsequently."

- E. If the donors are not available, or the donors refuse to undergo rescreening and testing, FDA guidelines do not preclude the use of the donors' embryos, provided that the documentation that accompanies the embryos includes the following labels: "NOT EVALUATED FOR INFECTIOUS SUBSTANCES," and "WARNING: Advise recipient of communicable disease risks." However, in the opinion of the ASRM, embryos derived from donors who refuse to be screened and tested or are not available to be screened and tested as recommended (see section II.C) should not be transferred.
- F. The embryo donors must sign an informed-consent document indicating their permission to use their embryos for embryo donation. Issues to be addressed in the consent form include:
  1. Relinquishing all rights of the donor(s) to the embryo(s) and any child or children that may result from the transfer of such embryo(s).
  2. Inadvertent loss or damage to the embryo.
  3. The right of the practice to refuse transfer to an inappropriate recipient.
  4. The length of time that donated embryos will be maintained in cryostorage, and the alternatives for their disposition thereafter.
  5. Jurisdiction and process for medical/legal procedures and/or dispute resolution.
- G. Proper chain-of-custody procedures must be followed and documented for the handling of all test specimens, and for donated embryos.
- H. Donors should receive no compensation for the donation other than reimbursement for specific expenses (e.g., blood tests).
- I. The decision to proceed with embryo donation is complex, and patients may benefit from psychological counseling to aid in the decision. Psychological consultation with a qualified mental health professional should be offered to all couples. The physician should require psychological consultation for couples in whom there appear to be factors that warrant further evaluation.

### III. Guidelines for Potential Recipients

- A. The recipient(s) must take full responsibility for the embryos and any child or children that may result from the transfer.
- B. The recipient(s) must release the gamete donors from any and all liability from any potential complications of the pregnancies, congenital abnormalities, heritable diseases, or other complications of the embryo donation. The ART program should also be absolved of liability from potential complications of pregnancy, congenital abnormalities, and heritable diseases.

- C. Recipient(s) must be willing to submit to the same blood tests as the donors (with the exception of genetic screening tests).
- D. Recipient(s) must conform to guidelines established by the practice that is performing the embryo transfer.
- E. The decision to proceed with embryo donation is complex, and patients may benefit from psychological counseling to aid in this decision. Psychological consultation with a qualified mental health professional should be offered to all couples participating in the donor-embryo process. The physician should require psychological consultation for couples in whom there appear to be factors that warrant further evaluation.

#### IV. Record Keeping

It is necessary to maintain permanent records of each donation (both donors and recipients). Clinical outcome should be recorded for each donation to the extent possible. A mechanism must exist to maintain these records as a future medical resource for any offspring produced.

#### V. Protection of Confidentiality

Individuals participating in donor programs should be assured that their confidentiality will be protected insofar as federal and local statutes permit. Medical records detailing the donation should be maintained as stipulated by local requirements.

### PSYCHOLOGICAL ASSESSMENT OF GAMETE DONORS AND RECIPIENTS

*The American Society for Reproductive Medicine Birmingham, Alabama*

#### Statement of Purpose

These recommendations are general guidelines for addressing the many complex moral, ethical, and psychosocial issues that confront gamete donors, recipients, and offspring.

#### I. Donors

- A. Psychological assessment by a qualified mental health professional is recommended for all gamete donors.
- B. A psychosocial history should include:
  1. Family history.
  2. Educational background.
  3. Assessment of stability.
  4. Motivation to donate.
  5. Current life stressors and coping skills.
  6. Difficult or traumatic reproductive history.
  7. Interpersonal relationships.
  8. Sexual history.
  9. Travel history.
  10. History of major psychiatric and personality disorders.
  11. Substance abuse in donor or first-degree relatives.

- 12. Legal history.
- 13. History of abuse or neglect.

- C. The psychological assessment should ensure that the donor has been informed about all relevant aspects of the medical treatment. Donors should be counseled about the number and type of infectious disease tests that will be performed and informed about how that information will be used and shared with others.
- D. The psychological assessment also should address the potential psychological risks and should evaluate for evidence of coercion (financial or emotional). It is also important to ascertain whether the donor is well informed about the extent to which information about him/her might be disclosed and about any plans that may exist relating to future contact. The donor must be aware of all aspects of potential embryo management and disposition applicable to that practice. Donors should be informed about how the information will be used, stored, and secured.
- E. Relative exclusion criteria for a gamete donor include:
  1. Presence of significant psychopathology.
  2. Positive family history of heritable psychiatric disorders.
  3. Substance abuse.
  4. Two or more first-degree relatives with substance abuse.
  5. Current use of psychoactive medications.
  6. History of sexual or physical abuse with no professional treatment.
  7. Excessive stress.
  8. Marital instability.
  9. Impaired cognitive functioning.
  10. Mental incompetence.
  11. High-risk sexual practices.
- F. Candidates who are excluded from the donor practice should be counseled regarding the reasons for their exclusion and, if appropriate, offered referral.
- G. In cases involving known donors, related issues such as the potential impact of the relationship between the donor and recipient should be explored. The impact of treatment failure should also be addressed.

#### II. Recipients

- A. Recipients of donor gametes should receive counseling about the potential psychological implications.
- B. The recipient should be counseled about their subsequent feelings concerning the medical conditions that necessitated the use of donor gametes.
- C. Counseling should address the impact of successful treatment: feelings during pregnancy, positive and negative aspects of disclosure and nondisclosure with offspring, potential impact of multiple pregnancy, transition to parenthood, parenting at an older age (if applicable), and nonbiological parenting issues.

- D. The impact of treatment failure should also be addressed: coping with treatment termination, the grieving process, and developing alternatives for the future.
- E. In cases involving known donors, related issues, such as the potential impact of the relationship between donor and recipient, should be explored.
- F. The recipients should be informed about the screening and testing required of the donor. The couple should be made aware that a donor may be deemed unsuitable for donation and that the practice may refuse to use these gametes for treatment. If the recipient couple elects to use a donor who is deemed unsuitable, then additional counseling must involve risk management and an agreement that the recipient couple understands and assumes the risk. Couples should be informed that the records related to the screening and testing of the donor will be stored. The storage of this information is relevant to the recipients because it relates to other information-sharing decisions they may make.

## PSYCHOLOGICAL GUIDELINES FOR EMBRYO DONATION

*The American Society for Reproductive Medicine Birmingham, Alabama*

### Statement of Purpose

These recommendations are general guidelines for addressing the many complex moral, ethical, and psychosocial issues that confront embryo donors, recipients, and offspring.

### I. Donors

- A. All potential donor couples should be informed about all aspects of their medical treatments and the relevant psychological and ethical issues inherent in donating embryos.
- B. There should be a discussion of embryo disposition options before cryopreservation. After couples have concluded their own reproductive attempts, embryo disposition options should be re-evaluated.
- C. Psychological assessment by a qualified mental health professional is recommended to ascertain suitability of potential donors. The assessment should include a clinical interview and, where appropriate, psychological testing. The assessment should occur after couples have concluded their own reproductive attempts and have clearly indicated their desire to donate embryos.
- D. The clinical interview should include a psychosocial history of both partners which addresses:
  1. Family history.
  2. Educational background.
  3. Assessment of stability.
  4. Motivation to donate.
  5. Current life stressors and coping skills.
  6. Difficult or traumatic reproductive history.
  7. Interpersonal relationships.

8. Sexual history.
9. History of major psychiatric and personality disorders.
10. Substance abuse in donor or first-degree relatives.
11. Legal history.
12. History of abuse or neglect.
13. Emotional attachment to embryo.

- E. Psychological testing is recommended to document and validate in a standardized objective manner the information gathered from the clinical interview and should include an objective personality test and other self-report measures to assess potential instability or psychopathology.
- F. Relative exclusion criteria for an embryo donor include:
  1. Presence of significant psychopathology.
  2. Positive family history of heritable psychiatric disorders.
  3. Substance abuse.
  4. Two or more first-degree relatives with substance abuse.
  5. Current use of psychoactive medications.
  6. History of sexual or physical abuse with no professional treatment.
  7. Excessive stress.
  8. Marital instability.
  9. Impaired cognitive functioning.
  10. Mental incompetence.
  11. High-risk sexual practices.
- G. A minimum 3-month waiting period with appropriate follow-up assessment is recommended between the time a couple signs the consent form to donate embryos and the actual donation to a recipient couple.
- H. Physicians and employees of an infertility practice should be excluded from participation in embryo donation (as donors or recipients) within that practice.
  - I. Donors should not be compensated for their donated embryos.
  - J. Donors should be at least 21 years of age.
- K. All potential donor couples should be advised at the time of the in vitro fertilization (IVF) procedure that additional screening and testing may be required if they elect to donate their embryos. The couple should be counseled about their possible ineligibility to donate embryos.

### II. Recipients and Their Partners

- A. Recipients of donor embryos and their partners should receive counseling about the potential psychosocial implications.
- B. The recipient and her partner should be counseled about their subsequent feelings concerning the medical conditions that made necessary the use of donor embryos.
- C. The impact of treatment failure should also be addressed, including coping with treatment termination, the grieving process, and developing alternatives for the future.
- D. Relative issues, such as the impact of the relationship between known donors, recipients, and offspring, should be explored.

- E. Psychological assessment is recommended to assess appropriateness of the potential recipient and her partner. This assessment should attempt to exclude significant psychiatric illness and current substance abuse and to evaluate their ability to cope with the stress of assisted reproductive technologies.
- F. Recipients of donor embryos should be advised of screening and testing requirements and be prepared either to not use or to assume the risks related to the use of donor embryos.

## APPENDIX A: MINIMUM GENETIC SCREENING FOR GAMETE DONORS

*The American Society for Reproductive Medicine Birmingham, Alabama*

### I. The Donor:

- A. Should not have any major mendelian disorder. Mendelian disorders fall into the following categories:
  1. Autosomal dominant or X-linked disorders in which age of onset extends beyond the age of the donor, such as Huntington disease.
  2. Autosomal recessive inheritance (homozygous). Donors who are heterozygous need not necessarily be excluded if recipients are not carriers.
- B. Should not have (or have had) any major malformation of complex cause (multifactorial/polygenic), such as spina bifida or heart malformation. A major malformation is defined as one that carries serious functional or cosmetic handicap. However, the definition of "major" is a matter of judgment.
- C. Should not have any significant familial disease with a major genetic component, particularly in their first-degree relatives (parents, siblings, and offspring).
- D. Should not carry a known karyotypic abnormality that may result in chromosomally unbalanced gametes. Among healthy young adults, the chance of having a chromosomal rearrangement that could be transmitted in unbalanced form to offspring is small. For this reason, routine karyotyping of all donors is optional.
- E. A member of a high-risk group should be tested to determine carrier status for those disorders they are at

higher risk of carrying. The list of tests may change as new tests for other disorders are developed. Heterozygosity need not necessarily exclude a donor, but certain donors may be inappropriate in a given case. (See the website for the American College of Obstetricians and Gynecologists at <http://www.acog.org/>.)

- F. **New screening guidelines for cystic fibrosis in the general population have been developed recently by the American College of Obstetricians and Gynecologists and other organizations and apply to gamete donors. All gamete donors should be evaluated by the current tests recommended at the time of the donation.**
- G. Oocyte donors may be tested for fragile X carrier status at the discretion of the individual program.
- H. Donors should be generally healthy and young. Males 40 years and older are at increased risk for new mutations. Women 35 years and older are at increased risk for producing offspring with aneuploidy.

### II. The donor's first-degree relatives (parents, siblings, and offspring) should be free of:

- A. Mendelian disorders as described in Section I.A.
- B. Major malformations as described in Section I.B.
- C. A chromosomal abnormality, unless the donor has a normal karyotype.

If family history reveals a disorder for which definitive testing is available, and it is important to consider that candidate further as a donor, then it is appropriate to test for that specific disorder. Results will determine appropriateness of that donor.

*Acknowledgments:* This report was developed under the direction of the Practice Committee of the American Society for Reproductive Medicine as a service to their members and other practicing clinicians. While this document reflects appropriate management of a problem encountered in the practice of reproductive medicine, it is not intended to be the only approved standard of practice or to dictate an exclusive course of treatment. Other plans of management may be appropriate, taking into account the needs of the individual patient, available resources, and institutional or clinical practice limitations. The Practice Committee of the American Society for Reproductive Medicine, the Executive Council of the Society for Assisted Reproductive Technology, and the Board of Directors of the American Society for Reproductive Medicine have approved this report.