They Can’t Have My Embryo: The Ethics of Conditional Embryo Donation

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ABSTRACT

There are substantial numbers of frozen embryos in storage that will not be used by those who produced them for their own fertility treatment. One option for such embryos is to donate them to others to use in their fertility treatment. There has been considerable debate about how this process should be organized. In the US, there are embryo adoption programmes that mediate between those relinquishing embryos and potential recipients. This is a form of conditional embryo donation, where the relinquishing couple can choose the recipient of their embryo. This article examines the ethical debate over conditional embryo donation for family building and explores the question of whether those who have unused frozen embryos should be able to determine who receives their embryos. The main objections to conditional embryo donation are examined: first, the embryo is not a person and therefore such concern over the placement of an embryo is unwarranted; secondly, potential donors might impose morally problematic conditions on who should receive their embryo; and thirdly, there are practical difficulties regarding organizational arrangements and the associated costs involved. It will be concluded that these objections can be countered and that if people wish to donate and receive embryos in this way there is no ethical objection to them doing so.

Keywords: embryo donation, embryo adoption, unused embryos, conditional donation, family-building, moral status of the embryo, embryo, infertility treatment

INTRODUCTION

There has been a debate about how the donation of frozen embryos to third parties who wish to use them to conceive a child should be carried out. In the US, there are embryo adoption programmes that mediate between those relinquishing embryos and potential recipients. This is a form of conditional embryo donation, where the relinquishing couple can choose the recipient of their embryo, based on various factors (such as a family report, social worker reports and police checks etc). Guidelines on donation of embryos for family-building in New Zealand also incorporate conditional donation procedures. These provide for those relinquishing embryos to be involved in choosing recipients. This article examines the ethical debate over conditional embryo donation for family-building and explores the question of whether those who have unused frozen embryos should be able to choose, that is impose conditions on, to whom they relinquish.

This article considers the main objections to conditional embryo donation: first, the embryo is not a person and therefore such concern over the placement of an embryo is unwarranted; secondly, potential donors might impose morally problematic conditions on prospective recipients of their embryo; and thirdly, there are practical difficulties regarding organizational arrangements and the associated costs involved. The arguments against conditional embryo donation can be countered: such a programme does not have to be premised on the embryo having any moral status, but on future interests it might have when it becomes a person, and the interests of those donating; issues of morally problematic conditions could be addressed; and the practical difficulties can be surmounted. It will be argued that if people wish to donate and receive embryos in this way there is no ethical objection to their doing so. We will confine our discussions to embryos and not consider whether conditional procedures should apply to gametes, as it can be argued that embryos are different from gametes in certain key respects, and there is not space to examine these issues in this paper.

BACKGROUND
As a result of recent developments in reproductive technology, women undergoing IVF are likely to produce more oocytes than can be used in a single treatment cycle. One option is to have them fertilised and the resulting embryos cryopreserved. Subject to legal and regulatory provisions in different jurisdictions, four options may be available to those with unused cryopreserved embryos at the end of their treatment: leaving them in storage; destroying them; donating them to research; or transferring them to one or more couples or individuals for family-building. The number of stored embryos has been rising due to the combined impact of improvements in technology and restrictions on the number of embryos that may be transferred in a single cycle of treatment. While there are no current statistics on the number of ‘surplus’ embryos in storage worldwide, almost a decade ago there were estimated to be roughly 400,000 embryos stored in the United States, approximately 47,000 of which (12%) will not be used by the couples who placed them in storage. The precise numbers of frozen embryos cannot be determined in the United Kingdom because of the way data are reported, but on average 45,000 embryos are frozen and stored each year.

Embryo donation for family-building was first reported in 1983. However, such practices are expressly forbidden in many jurisdictions, and where they are permitted, the prevalence is not easy to ascertain. In the US, according to the Centers for Disease Control and Prevention (CDC), in 2007 67% of the 430 fertility clinics reporting treatment outcomes offered donor embryo services. However, the CDC data give no information about the services actually provided. In 2004, Gurmankin et al. reported that 76% of the clinics responding to their survey offered donor embryo services but, as with the CDC data, did not indicate the prevalence of the services actually provided. Two studies show differences between the number of clinics offering embryo donation services and those providing them in practice. Kingsberg et al. reported that only 37% of clinics had provided embryo donation, while Hurwitz et al. reported that 60% had done so. A study by Hammond et al. reported on an opportunistic poll of fertility clinics’ representatives attending a symposium on third party assisted reproduction, of whom 41% claimed to currently offer a programme and another 20% were considering doing so. In the UK between 1992–2009, 1,218 children were born from embryo donation. In 2010, 269 patients were treated using donor embryos (the highest number since 1992). This, however, remains a small part of donor treatment, with 1,380 being treated with donor eggs and 2,960 patients using donor sperm.

What is conditional donation?

For the purposes of this article we will use the term ‘conditional’ donation to mean those who have frozen embryos ‘specifically selecting’ to whom they will donate their embryo. This is as opposed to putting ‘blanket conditions’ on who should receive their embryo (i.e. not wanting to donate to single woman). The HFEA, in the most recent Code of Practice, stipulates that gamete and embryo donors can ‘specify extra conditions for storing or using their gametes (or embryos created using them)’, thus allowing such ‘blanket conditions’. In the broad sense there is no ‘unconditional’ embryo donation in the UK since any recipient of a donated embryo (or gamete) would be chosen by careful vetting on behalf of the clinic and according to welfare of the child principles. The debate considered in this article is whether to allow embryo donors to ‘specifically select’ who should receive their embryo on the basis of reviewing the characteristics of the recipient.

There are various ways of organizing embryo donation, which can incorporate different levels of involvement of those who are donating the embryo and different levels of openness and information sharing between the donor and the recipients. For clarity we shall divide the options into possible models of conditional embryo donation (these models are not exhaustive but cover the main ways of organizing this practice).

1. A non-specific selecting, anonymous model. The embryo donors would play no part in any decision regarding the selection of recipients of their embryos. The clinic would select who received the embryo. Those receiving the embryo(s) could get some information about the donors, but this (as is often the case in gamete donation) is generally limited to physical characteristics and health status of the donor. The donation would be anonymous and there
would be no formal arrangements enabling any resulting child to find out the identity of their donors.

2. A non-specific selecting, non-anonymous model. As Model 1, but when the resulting child reached majority or a specified age, they would be able to access identifying information about their embryo donor (such as the non-anonymous model as exists in the UK).

3. A specific selecting, non-anonymous model. Here the donors would select who received their embryo and any resulting child would be able to access identifying information about their donor. In some examples of this (i.e. New Zealand) this access to information is guaranteed by law.

The majority of existing conditional embryo programmes incorporates some form of non-anonymity, as they promote both non-anonymous donation and facilitate contact between donors and recipients while the child is growing up. For instance, the guidance issued by Advisory Committee on Assisted Reproductive Technology (ACART) in New Zealand states that donors and recipients should negotiate ‘Each other’s needs, wishes, expectations, and plans regarding ongoing contact and information sharing.’ This is different from the nonanonymous donation programmes that operate in the UK, for example, as access and information about the donor is only available when the child reaches majority. Conditional donation and non-anonymity do not have to go hand-in-hand, but in practice these programmes keep records and allow contact between the donors and recipients to be negotiated while the child is growing up. Thus, conditional embryo donation seeks to create a ‘relational model’ of donation, whereby the donation heralds the forming of many new family relationships rather than a one-off event conducted in the clinic. Embryo adoption agencies operate a form of conditional embryo donation. The first embryo adoption programme, Snowflakes® Embryo Adoption, was launched in 1997 by Nightlight Christian Adoptions, a California based adoption agency. This is an example of the third model. Even if the relinquishing couple chooses not to know the identity of recipients and plans no contact with them, these programmes generally operate as nonanonymous systems and recommend that any child born should be able to learn the identity of her or his genetic parents (although in the US this is not legally enforceable). There are now at least seven agencies in the United States offering an embryo ‘adoption’ service. New Zealand’s conditional embryo donation programme is another example. Those wishing to donate embryos must apply to the Advisory Committee on Assisted Reproductive Technology (ACART). In 2011-12 the Ethics Committee on Assisted Reproductive Technology (ECART) reviewed 15 applications for embryo donation for reproductive purposes; 14 were approved and one approved subject to conditions. To date 14 live births have results from embryo donation applications approved by ECART. ACART requires relinquishing couples to be provided with a profile of the potential recipients that includes any police vetting information. Both relinquishing and recipient couples are required to have independent legal advice and counselling and any resulting child has access to identifying information when they reach majority. In sum, conditional embryo donation programmes allow those relinquishing their embryos to specifically select who receives their embryos and be actively involved in that process, rather than donating to a facility that then allocates the embryo.

ARGUMENTS AGAINST CONDITIONAL DONATION

The moral status of the embryo and conditional donation.

One of the main criticisms of conditional embryo donation programmes has been made by the American Society of Reproductive Medicine (ASRM), in a report published in 2009, *Defining embryo donation,* that considered the ethical acceptability of an embryo adoption model of embryo relinquishment. In this the Committee argued that the ‘application of the term “adoption” to embryos is inaccurate [and] misleading’ and concluded that ‘the donation of embryos for reproductive purposes is fundamentally a medical procedure intended to result in pregnancy and should be treated as such.’ Seeing embryo relinquishment in this way provides a ‘framework for safe and ethical treatment of donors and patients requiring donated embryos for their treatment.’ The report goes on to argue that ‘applying the procedural requirements of adoption designed to protect existing children to embryos is not ethically justifiable and has the potential for harm.’ The Committee’s central
argument against embryo ‘adoption’ is that the embryo is not a person, although ‘Embryos are
deserving of special respect, but they are not afforded the same status as persons.’²⁹ Applying
the language of adoption to embryo relinquishment is deceptive ‘because it reinforces a conceptualization
of the embryo as a fully entitled legal being and thus leads to a series of procedures that are not
appropriate.’³⁰ This position has two parts: that this language reinforces a conceptualisation of
the embryo as a person and second, it leads to a series of procedures that are inappropriate. The ASRM
took exception to the language of embryo ‘adoption’ and this is not an argument against the practice
of conditional embryo donation itself, but the terminology used to describe it. The concern of ASRM
and others is that endorsement of embryo adoption supports a view of the embryo (and fetus) as
having full moral status. The risk here is of becoming embroiled in American abortion politics, the
potential impact on women’s rights to choose, and the wider implications for the provision of fertility
therapy that affording the embryo full moral status might have. Recent developments in the US such
as the personhood bills in Oklahoma and Virginia and embryo adoption legislation in Georgia show
that these concerns are warranted.³¹ Therefore, we would argue that the language of ‘adoption’ can be
polarizing and should be used cautiously in this context. The second point, that it leads to a ‘set of
procedures’ that are not appropriate, is a more important issue as it strikes at the heart of conditional
embryo donation, that these procedures of donors specifically selecting recipients of their embryo are
unwarranted. In this article we are concerned whether the argument can be upheld that if the embryo
is not a person (in the morally relevant sense), the use of such conditional donation procedures is
unwarranted.

There are two parts to the ‘not-a-person-argument’ against having conditional procedures (specifically
selecting to whom one donates one’s embryo) applied to embryo donation: first, the embryo is not a
person, it does not have the same moral status as an existing child (or indeed adult),³² second, and
consequent on this, the procedures envisaged under a conditional model of embryo donation are
inappropriate; procedures applied to the adoption of a child are designed to protect the child and the
embryo, not having moral status, does not need to be protected in this way. In this article we will not
seek to defend the view that the embryo is not a person and therefore does not have moral status but
accept this position without argument (this is a topic that has been extensively debated in medical
ethics).³³ For our purposes the key debate is about the implications of the lack of moral status of the
embryo for the procedures involved in conditionally donating embryos to others for family building.
We will consider two key objections to the claim that, as the embryo does not have moral status,
conditional donation procedures are unwarranted. First, we argue that although the embryo does not
have moral status, it may still have interests in its future – interests that are held by the person it might
become – and these might be furthered by some of the procedures that are currently employed by
conditional embryo donation procedures. Second, leaving this aside, these procedures could be
justified on the grounds that, regardless of any interest

The future interests of the embryo

Moral status does not need to be given to the embryo to justify a form of embryo donation that
employ the type of conditional procedures that have been discussed above. There are several
plausible arguments that suggest that there are reasons for treating the embryo in a certain way, not
based on the moral status it has now, but on the moral status it will have in the future. McMahon³⁴
puts forward an argument of this type. He argues that it is morally more reprehensible to harm a fetus
prenatally (and we hold that his arguments apply to
embryos as well) than to abort it. His arguments in support of this can be used to advance the claim
that embryos can have an interest in their future lives (this does not give them a right not to be
destroyed or used for research) and (if they are given an opportunity to develop into fetuses and then
children) these interests might be furthered by being donated in a particular way when they are an
embryo. There are two parts to the argument about future interests. First, the claim that the embryo
can have future interests that will become manifest when it becomes a person, and that although the
embryo’s current interests are weak (i.e. it has a weak interest in staying alive), actions that damage
the embryo’s future interests (in McMahan’s example prenatal injury) will damage interests held by
the person the embryo will become. Second, if this view of future interests is accepted, does the
application of conditional procedures ensure safeguards or promote the future interests of the person the embryo will become? McMahan’s argument proceeds by outlining assumptions about the fetus and future interests that he says are generally held. One such assumption, that he argues is held by most moral beliefs, is that we accept that current actions should be constrained by “respect for future interests – that is, interests that do not exist now, and indeed whose bearers may not exist now, but that will exist in the future.” He argues that we have a belief that it would be wrong to plant a bomb programmed to detonate in 150 years’ time that could harm the interests of people who do not exist now. The fetus’s current interests are weak, so it is not wrong to frustrate these current interests. But it is wrong to inflict some kind of prenatal injury on the fetus that will harm future interests it might have. This is because if the fetus has such an injury inflicted and comes to be born, this injury will frustrate (to use McMahan’s terminology) the many future interests this person will have throughout their life. Prenatal injury frustrates future interests, which may be the interests of a person and also quite strong. As Kamm puts it, ‘any duties we have to treat a fetus in a certain way exist only because of the person it will develop into.’

The assumption that we have obligations to others’ future interests in the way suggested by McMahan has an intuitive appeal. In applying the idea of future interests to the case of embryo donation, we need to establish that not being donated through conditional procedures is a harm to the embryo (a kind of prenatal injury) and therefore these procedures safeguard some future interests the embryo – when it becomes a person – might have. Such interests might be being brought up in a loving and supportive home and arguably being able to have information and possible contact with those who donated them and other genetic relatives, such as full genetic brothers or sisters. Therefore, just as we should act in those interests when the embryo becomes a person, we should act to further them for the future.

Issues that were important to those who relinquished their embryos in this way were: the suitability of recipients, future contact and information exchange between them and the recipients and creating future relationships and contact between their children and the child the embryo would become, who would be full genetic siblings. These concerns can be seen as an expression of the view that even though the embryo has no current interests, the interests it will have when it becomes a person are important. Research in this area is still limited and even if we accept McMahan’s claims about embryos’ future interests, there is no guarantee that conditional procedures promote such interests. It is by no means self-evident that embryo donation employing conditional procedures, as opposed to non-conditional donation, confers any benefit to the future child, as there is little evidence about the outcomes of any form of embryo donation. As regards evidence of psycho-social outcomes of embryo donation, to date only two empirical studies involving families built using donated embryos have been reported, undertaken in Finland and the UK. Given the paucity of good quality evidence concerning the experiences of family building following embryo donation, it is possible only to speculate about the potential psycho-social implications for those most closely involved, especially when the children conceived following embryo donation become older. Thus, pending more systematic research of both physical/medical and psycho-social outcomes, the implications of embryo donation using conditional procedures remain largely unknown. However, it has been argued that a relational model of donation is to be preferred and therefore on these grounds conditional donation, in supporting such a model, confers benefits to those involved.

The interests of relinquishers, their children and recipients

We now want to consider the second argument against the contention that, since the embryo is not a person, conditional procedures are unwarranted. These procedures can operate in the interests of those with embryos to donate, their children, and recipients of those embryos, rather than in the interests of the embryo. These procedures do not have to be premised on the moral status of the embryo or any interests it might have in the future (it can be accepted for the sake of this argument that the embryo has no interests), but on how the two adult parties want to organize the transfer of the embryo. Certain procedures, like the ability of the relinquishing couple to choose who receives their embryos and the ability to negotiate (possibly) giving contact and information both while the child is growing up and when (s)he reaches majority, are elements that are attractive to some individuals. Conditional
procedures can be justified without any recourse to claiming that the embryo has any moral status, interest in the future or rights – it can be seen as the choice of some individuals and couples as to how they wish to relinquish their embryos. This could be argued for on grounds of reproductive choice; people should be able to exercise this choice unless it can be argued that this causes harm to others.\textsuperscript{43} It could also be argued that conditional embryo donation serves the interests of the children whose parents donate their embryos for family-building better than an anonymous donation model. The embryos donated, if they result in the birth of a child, would be the full genetic siblings of children in the donors’ family, who could have a strong desire to meet or have information about their siblings. There is increasing evidence that at least some individuals conceived following third party assisted conception have a desire to learn the identity of their genetic relatives, including genetic half-siblings.\textsuperscript{44} Although there is no comparable evidence regarding the interests that children of donors might have in learning the identity of their half-siblings – in the case of sperm of egg donation - or full siblings - in the case of embryo adoption, there is no reason to assume that at least some will not also wish to learn about their genetic relatives, and this is a consideration taken into account by some couples who relinquish embryos through an embryo adoption agency.\textsuperscript{45} In this section we have argued that embryo donation using conditional procedures does not have to be premised on embryos having full moral status. It can be based on the embryo having future interests that could be met by this conditional donation model. But, even if this account of the embryo’s future interests is rejected, the procedures can be justified on the grounds of operating in the interests of donors and the resultant families.

**MORALLY PROBLEMATIC CONDITIONS**

A possible difficulty with conditional donation is that donors might make the choice of who receives their embryo on grounds that could be thought of as immoral. For instance, conditions might be specified that seemed to reflect some prejudice, such as racism or homophobia. The issue is brought into relief in the UK by fertility clinics having to abide by the Equality Act 2010. This stipulates that protected characteristics (such as sex, sexual orientation and disability) cannot be grounds for differential treatment. The Human Fertilization and Embryology Authority has considered how the Equality Act might affect conditional donation (of both gametes and embryos) and the latest guidance in the Code of Practice states that it is acceptable for donors to put conditions on the use of their eggs, sperm and embryos but: ‘When deciding whether or not to recruit donors who place conditions on the use of their gametes or embryos, the centre should judge whether this will result in less favourable treatment because of a protected characteristic (i.e. if it will reduce the choice of donors for a particular person by virtue of a protected characteristic).’\textsuperscript{46} So is conditional donation discriminatory morally and/or legally? As stated above, we have drawn a distinction between ‘specific selection’ (the type of conditional donation under discussion here) and ‘blanket conditions’ and therefore we need to consider each type separately to answer this question. Blanket conditions do seem to be discriminatory (morally at least). This issue was raised in organ transplantation in 1998 when a white man consented to donation of his organs to white recipients only – this can be seen as a blanket condition.\textsuperscript{47} The ensuing outcry resulted in recommendations that it was unethical to place conditions on who could receive one’s organs after death. However, the current situation with organ transplants is that conditions can be put on organs donated when the donor is alive,\textsuperscript{48} so that someone can donate a kidney to a person of their choice, rather than it being distributed according to those in the wider population who have a greater clinical need – a form of ‘specific selection’. Thus, choosing a particular recipient for a donated organ appears not to be discriminatory, but stipulating that it cannot be donated to anyone in a particular racial group does.

In terms of blanket conditions for embryos, clinics that were asked to ensure that no one from a particular group received the embryo might feel that by accepting conditions that, to their mind, were a result of prejudice, they would in some way be endorsing these views and decide not to operate their programme in this way due to their ethical views. Legally, as clinics are public bodies offering a public service, they have to abide by the Equality Act and it could be argued that by accepting the donor’s conditions, they would fall foul of the Act. However, the key issue is whether the protected group is disadvantaged and it is possible to speculate that not allowing conditions to be placed on
potential embryo recipients could discourage certain people from donating and therefore reduce the supply of donated embryos. For example, an embryo donated with the condition that it only went to a married (and currently therefore a heterosexual couple) could result in the freeing up other embryos (which had no such conditions) that could be used by a lesbian couple. Hence, the protected group (in this case lesbian couples) would not be disadvantaged – and by the supply of embryos increasing they would actually be advantaged. The Equality Act also stipulates that if unequal treatment is ‘proportionate’ with achieving a legitimate aim this is acceptable.49 The legitimate aim might be argued to be increasing the number of embryos available for donation and therefore allowing conditions in this way could be seen as ‘proportionate’.50 For the case of ‘specific selection’, it could be argued that those donating embryos are in a different position from clinics (since they are not bodies providing a service) and they could withdraw their consent for the donation if they felt no suitable recipient could be found. Their definition of ‘not suitable’ might be discriminatory or bizarre and it would be hard to have any redress against this. Donors are not under any obligation to provide reasons for withdrawing consent for their donation. This would seem to be a private decision of how to dispose of one’s own property. For example, if someone was to sell their house and a member of group x puts in a good offer for it that is refused (on the grounds that the seller is prejudiced against members of group x and don’t want to sell their house to them), the seller is not accountable to anyone for that decision or compelled to justify why they have sold their house to someone from group y and not someone from group x. This decision is based on prejudice and the person from group x is being discriminated against, but no one would be aware of this. This is not to say that those making specific choices regarding to whom they donate their embryo are always discriminating or that such covert discrimination is right, just that it would be impossible to tell if they were discriminating against certain groups. In other areas of life we allow people to choose to whom to sell things, who they have as friends and form relationships with. Conditional embryo donation should be no different. As in these other areas of life, we seek to discourage discrimination by education and this could be done in this area by clinics counselling people with embryos to encourage choices that are not made on the basis of arbitrary characteristics.

PRACTICAL OBJECTIONS TO CONDITIONAL RELINQUISHMENT

There are a number of practical objections that can be made to conditional donation. The ASRM argues that conditional donation along the lines of an embryo ‘adoption’ model would impose ‘unwarranted burdens’ on infertility patients, such as home visits, judicial review, legal and ‘substantial’ agency fees that are not ‘ethically justifiable’.51 This is a fear that the complex and arduous processes involved in adopting an existing child would be applied to embryos under a conditional programme. This type of criticism presupposes a particular model of conditional donation. Judicial review in the sense of court-directed transfer of parental responsibility from relinquishing to recipient parents does not play any part in the current programmes of conditional donation. As noted above, the legal framework for the adoption of existing children is not applicable to an embryo (except in a limited number of jurisdictions). Conditional donation could operate in a variety of ways and does not have to be directly analogous to adoption procedures for existing children. It could encompass varying degrees of involvement in choosing recipients by those donating embryos (from choosing recipients on the basis of detailed profiles to allowing the agency or clinic to select recipients); differing levels of contact arrangements between the donors and recipients once the child is born (from face-to-face contact, to email updates, exchange of photographs/ information, to no contact until the child is an adult). Any objection to conditional donation based on criticisms of an onerous procedure is a challenge to one form of conditional donation. In any event, any individual contemplating family building by means of embryo donation who found these procedures excessively burdensome would be under no pressure to choose this route, and if insufficient takers existed for this type of service it would soon cease to be viable.

CONCLUSIONS

We have argued that the objections to conditional donation that we have considered can be countered. So what implications does the above discussion have for the debate over how embryos should be
donated? As we have argued, we do not think there is compelling evidence to prioritize one approach over another in this context. There is no conclusive evidence to suggest that the welfare of the child the embryo will become is better safeguarded by being relinquished through a conditional donation programme – that the parents chosen make ‘better’ parents or the screening ensures a higher degree of welfare. However, conditional donation programmes generally promote open and non-anonymous donation and this has been argued to better meet the needs of those born from the process to find out information about the family who relinquished them and encourage a more ‘relational’ model of donation. Conditional embryo donation options should be available, as well as the option of allowing the clinic to allocate the embryo with no intervention from the donors, to maximize acceptable options for those with unused embryos.

REFERENCES

1. Differences between embryos and gametes could be based on the following: the embryos are generally the product of a couples’ family building attempts (although some donor eggs come from egg sharing); the resulting children will be the full genetic siblings of the donors’ children; and embryos are often seen as deserving of respect in a way gametes are not. Whether such differences can be upheld and the implications for conditional donation will be subject of a companion paper to this one currently in preparation.
14. See later discussion.
15. HFEA, op. cit. note 13. Section 8.
17. ASRM, op. cit., note 16.
18. We are not aware of any conditional embryo donation programmes that operate under conditions of anonymity, although it would, of course, be possible.
22. ACART, op. cit. note 19.

24. ASRM Ethics Committee Report. Defining Embryo Donation. *Fertility & Sterility* 2009; 92: 1818–1819. The ASRM has recently updated this guidance to be published in 2013, but the content and argument remains the same in both iterations.


27. Ibid.

28. Ibid.


30. Ibid.


32. For brevity we will use ‘moral status’ as a short form for ‘moral status generally accorded to an existing child or adult’.


35. McMahan, op cit, note 34, p. 629.


38. Frith, *op. cit. note 19*.


45. Frith et al., *op. cit. note 20*.


50. This would need to be tested in the Courts to assert it with certainty.

51. ASRM, *op. cit. note 18*.


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