



Questioning the 14-day rule for embryo research

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Outline

- Background of the 14-day rule
- Arguments against extending the 14-day rule
- Reasons for extending the rule from 14 to 28 days
 - Benefits to research on stem cell-derived gametes and gene editing
 - Benefit to research on 'synthetic' embryos and organoids
- Ethics, policy and governance
- Conclusion

Background of the 14-day rule



- 1978 – world's first IVF baby is born – Louise Brown
- 1979 – US Department of Health, Education and Welfare publish a report proposing the 14th day as a possible regulatory limit for the development of embryos in-vitro
- 1982 – ‘Warnock Committee’ in UK resulted in 14-day limit to embryo research in UK law (i.e. Human Fertilisation and Embryology Act 1990)
- Countries ranging from Belgium, UK, USA and others have used the ‘14-day rule’, albeit with differing formulations in policy and practice.
- However, there has been increasing debate about the need to remove and/or extend the 14-day rule in order to potentially accommodate advances in science in a safe way

Arguments against extending the 14-day rule



- Is it a moral limit?
- Is the individuation of the embryo a good reason?
- Is the possibility of pain and suffering a good reason?
- Is the removal of the rule the beginning of a slippery slope?

Reasons for extending the rule from 14 to 28 days

Benefits to research on stem cell-derived gametes and gene editing

- Benefits to stem cell-derived gametes (aka. artificial gametes, synthetic gametes, in-vitro derived gametes)
- Benefits to gene editing

Reasons for extending the rule from 14 to 28 days

Benefit to research on ‘synthetic’ embryos and organoids

- Benefit to synthetic embryo research
 - Are they safe?
 - What are their capabilities?
- Benefit to organoid research
 - Contributes to an ecosystem of new emerging ARTs (assisted reproductive technologies)
 - Important for studying the development of different tissue models together

Ethics, policy and governance



- Is the 14-day rule fit for purpose?
- There is a need to extend the rule to 28 days
- No compelling moral reasons not to extend
- Many reasons for maintaining 14-day rule are based on misunderstanding of the rule's purpose or the associated science
- The safety and progress of valuable science should be our aim
 - Rules are of no value if they are not fit for purpose

Thank you



Questions?

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