

Adipose

Adipose tissue is loose connective tissue mostly containing adipocytes. Adipose tissue is a source of stem cells.



Stem Cell Flash Cards

Allogeneic

Obtained from another individual. In the case of a transplant the recipient receives cells/tissue from a donor. The donor could be a stranger or a family member.



Stem Cell Flash Cards

Autologous

Obtained from the same individual. In the case of a transplant the recipient receives their own cells/tissue.



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Blastocyst

A structure formed in the early development of mammals - in humans its formation begins five days after fertilisation.



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Bone Marrow

Found within bone cavities, bone marrow contains stem cells which manufacture blood components.



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Cord Blood

The least invasive and most stem cell dense source of stem cells found in the human body.



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Cryopreservation

The process whereby collected stem cells are stored in liquid nitrogen at sub zero temperatures.



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Differentiation

The ability of a cell to differentiate; to create more specialised cell types.



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Embryonic Stem Cells

Stem cells taken from an embryo at the blastocyst stage.



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Engraftment

The process of transplanted stem cells proliferating in the body and being accepted.



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Fanconi Anaemia

The first cord blood transplant was performed in 1988 to treat Fanconi Anaemia in a boy who was transplanted with his sister's cord blood.



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Haematopoietic Stem Cells (HSCs)

Multipotent stem cells responsible for the manufacture of blood cells.



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Induced Pluripotent Stem Cells (iPS)

Stem cells created from skin cells - a useful tool in research.



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Mitosis

Cell division resulting in two identical copies of the initial cell.



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Potency

The ability of a cell to differentiate. As cells become increasingly specialised their ability to differentiate diminishes until they can only replicate their own cell type.



Stem Cell Flash Cards

Proliferation

The ability of a cell to multiply.



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Regenerative Medicine

Using the body's own cells to repair or replace damaged or disease tissues.



Stem Cell Flash Cards

Stem Cell

A cell with the power to produce more specialised cells.



Stem Cell Flash Cards

Syngenic Transplant

A rare kind of transplant whereby the donor and recipient of cells/tissue are identical siblings; for example twins.



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Zygote

The initial cell formed when the sperm and egg join.



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Stromal Stem Cells

Adult stem cells; found throughout the body. Babies have adult stem cells.



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