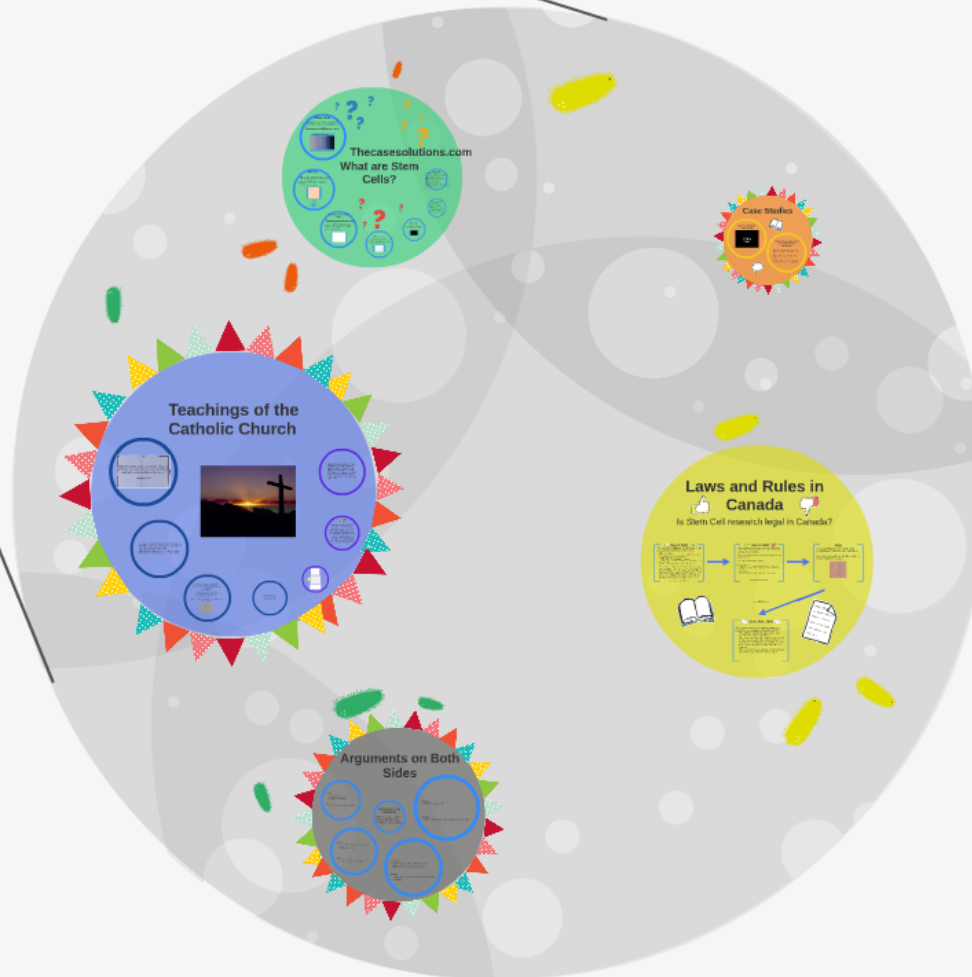




Sydney IVF: Stem Cell Research

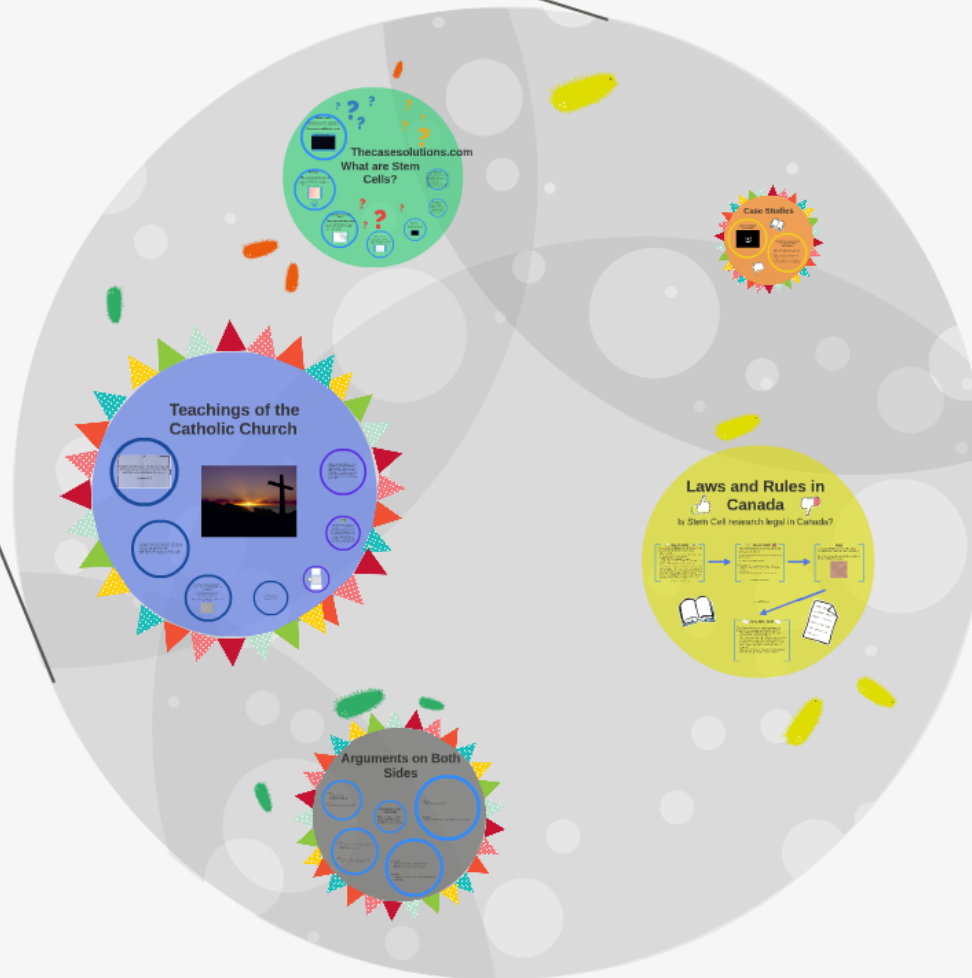
Thecasesolutions.com





Sydney IVF: Stem Cell Research

Thecasesolutions.com



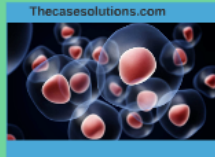
Thecasesolutions.com

What are Stem Cells?

Stem Cells

Stem Cells are cells with the ability to divide continuously to give rise to specialized cells.

Thecasesolutions.com



Embryo

Thecasesolutions.com

In humans, the developing organism from the time of fertilization until the end of the eighth week of gestation, when it is called a fetus.

In other words, a potential human being.



Somatic (adult) Stem Cells

Thecasesolutions.com

They are rare undifferentiated cells found in many organs and differentiated tissues with a limited capacity for both self-renewal and differentiation.

They are non-embryonic.



Amniotic Stem Cells

A mixture of stem cells found in the amniotic fluid surrounding a fetus during pregnancy. They as well, have the potential to transform into various tissue types.



Blastocysts

A five- to seven-day old embryo in early embryonic development that consists of a cluster of cells called the inner cell mass surrounded by the outer cells.



Works Cited

Thecasesolutions.com. "Stem Cells." *Thecasesolutions.com*. 2014. Web. 10 Oct. 2014. <http://www.thecasesolutions.com/stem-cells>

Embryonic Stem Cells. *Embryonic Stem Cells*. National Institutes of Health. 2014. Web. 10 Oct. 2014. <http://www.nih.gov/embryonic-stem-cells>

Embryonic Stem Cells. *Embryonic Stem Cells*. National Institutes of Health. 2014. Web. 10 Oct. 2014. <http://www.nih.gov/embryonic-stem-cells>

Embryonic Stem Cells. *Embryonic Stem Cells*. National Institutes of Health. 2014. Web. 10 Oct. 2014. <http://www.nih.gov/embryonic-stem-cells>

Embryonic Stem Cells. *Embryonic Stem Cells*. National Institutes of Health. 2014. Web. 10 Oct. 2014. <http://www.nih.gov/embryonic-stem-cells>

Embryonic Stem Cells. *Embryonic Stem Cells*. National Institutes of Health. 2014. Web. 10 Oct. 2014. <http://www.nih.gov/embryonic-stem-cells>

Embryonic Stem Cells. *Embryonic Stem Cells*. National Institutes of Health. 2014. Web. 10 Oct. 2014. <http://www.nih.gov/embryonic-stem-cells>

Embryonic Stem Cells. *Embryonic Stem Cells*. National Institutes of Health. 2014. Web. 10 Oct. 2014. <http://www.nih.gov/embryonic-stem-cells>

Embryonic Stem Cells. *Embryonic Stem Cells*. National Institutes of Health. 2014. Web. 10 Oct. 2014. <http://www.nih.gov/embryonic-stem-cells>

Embryonic Stem Cells. *Embryonic Stem Cells*. National Institutes of Health. 2014. Web. 10 Oct. 2014. <http://www.nih.gov/embryonic-stem-cells>

Stages of Embryonic Stem Cell Research

1. Fertilization of an egg and sperm to form a zygote.

2. Cleavage of the zygote into a morula.

3. Formation of the inner cell mass (ICM) and outer cell mass (OCM).

4. Isolation of the ICM and OCM.

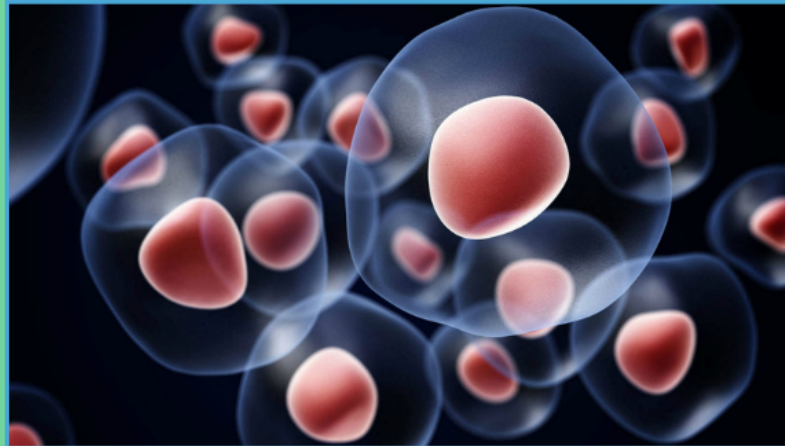
5. Differentiation of the ICM and OCM into various cell types.

Stem Cells

Stem Cells are cells with the ability to divide continuously to give rise to specialized cells.

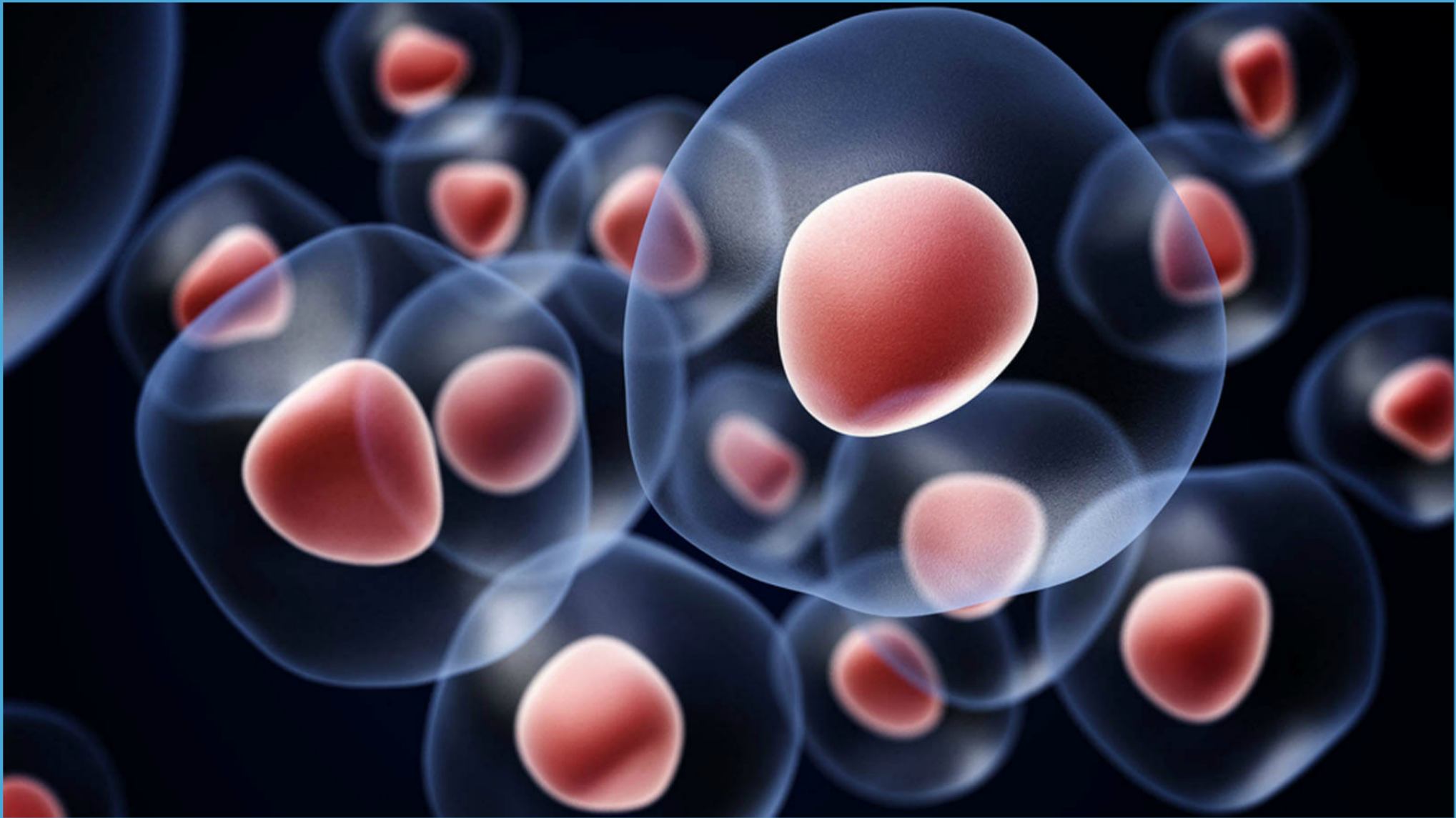
Thecasesolutions.com

Thecasesolutions.com



T

Thecasesolutions.com



Embryo

Thecasesolutions.com

*In humans, the developing organism from the time of fertilization until the end of the eighth week of gestation, when it is called a **fetus**.*

In other words, a potential human being.



Embryonic Stem
Cells

Thecasesolutions.com

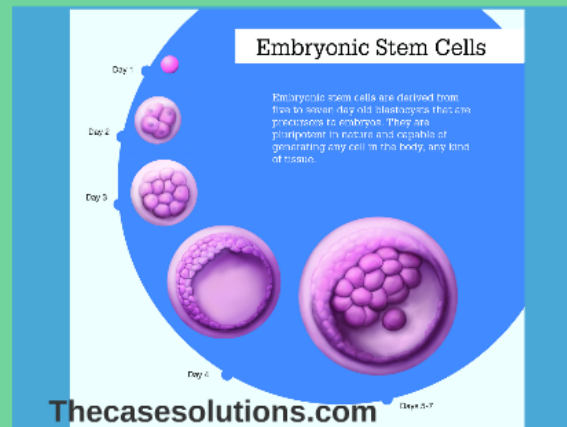
Primitive cells found in a 5 day old embryo that are capable of dividing without differentiating for a prolonged period, and are known to develop into cells and tissues of the three primary germ layers.



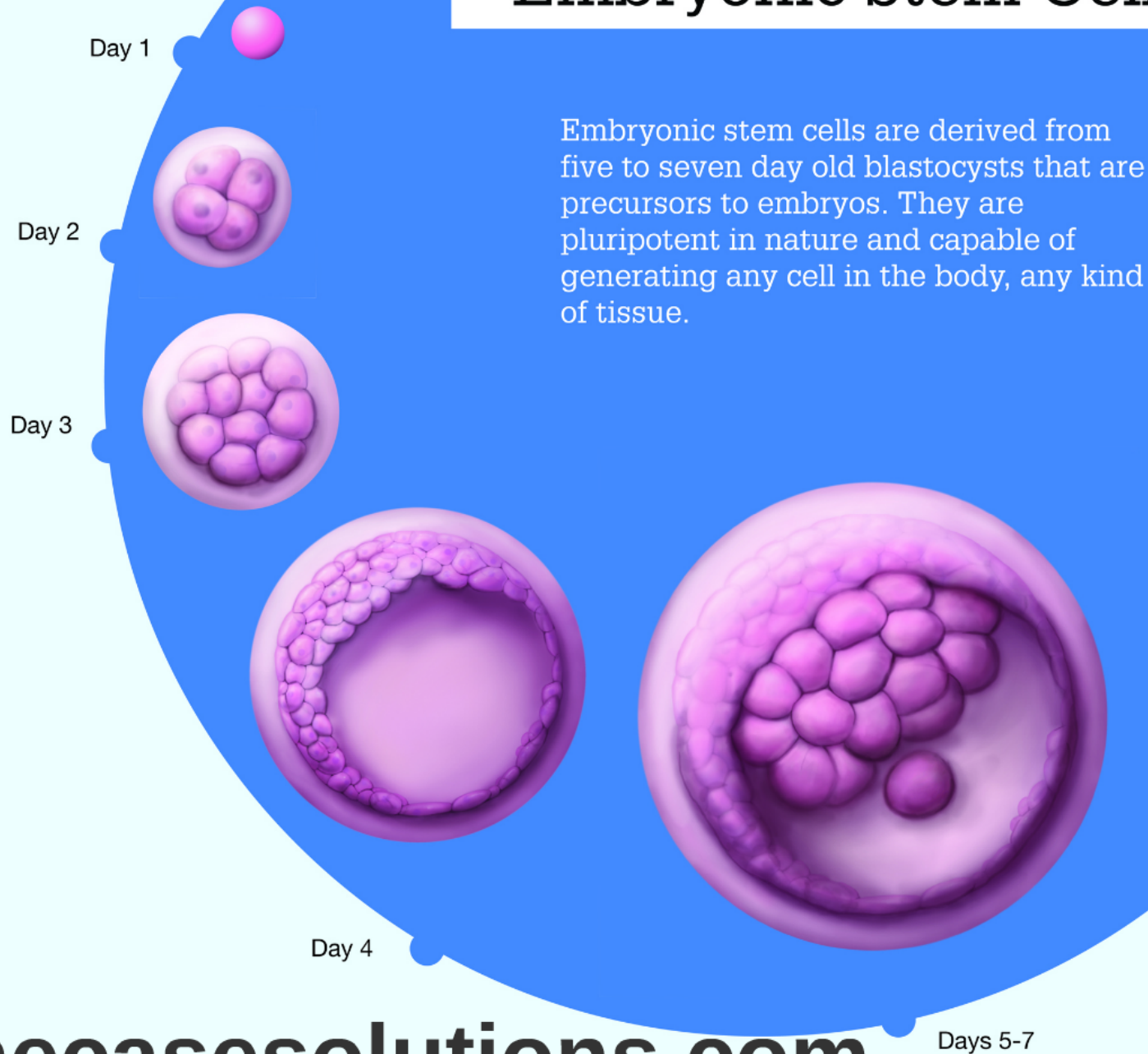
Embryonic Stem Cells

Thecasesolutions.com

Primitive cells found in a 5-day old embryo that are capable of dividing without differentiating for a prolonged period, and are known to develop into cells and tissues of the three primary germ layers.



Embryonic Stem Cells



Somatic (adult) Stem Cells

Thecasesolutions.com

They are rare undifferentiated cells found in many organs and differentiated tissues with a limited capacity for both self-renewal and differentiation.

*They are **non-embryonic**.*

