

KIDScore™ D3 decision support tool

KIDScore D3 is a model based on the morphokinetic traits associated with the implantation potential of embryos transferred on day 3. The model is designed to help clinics avoid transferring embryos with low implantation potential. This reduces the number of embryos that clinic personnel needs to consider for transfer and freezing.

KIDScore D3 is robust, safe and easy to use and will provide the immediate benefit of using time-lapse for embryo evaluation. The model has been validated for day 3 transfers in a wide range of clinics.

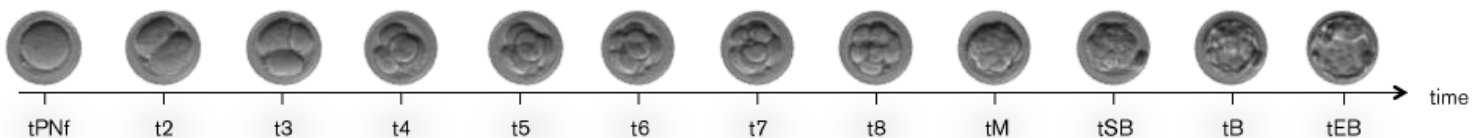
Morphokinetics defined

When embryos are monitored during cultivation by using time-lapse technology, their dynamic development is revealed. This can be described by morphokinetics – the dynamics of embryo morphology.

Embryo morphokinetics describes the events which take place as the embryo develops. Each event is registered as

a variable with an associated value. As an example, “t2” denotes the exact time when the embryo divided into two cells.

Several studies have shown morphokinetic variables to be correlated to embryo implantation potential. However, due to variations in culture conditions, clinic protocols, patient factors etc., the variables that describe these patterns often vary between clinics.



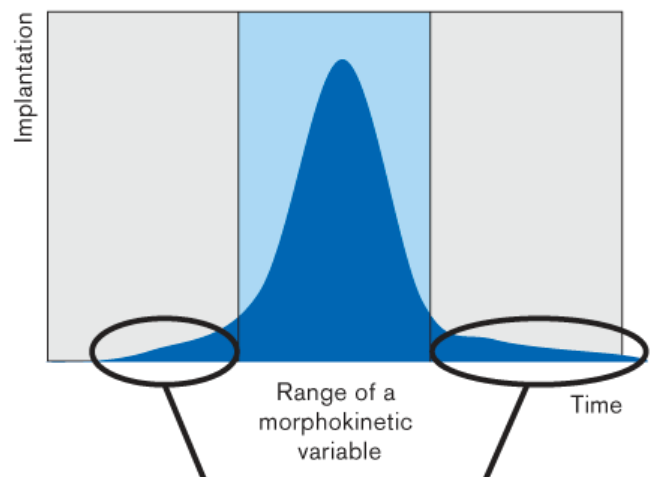
Principles of KIDScore D3

KIDScore D3 is based on morphokinetic information from more than 3300 embryos with known implantation status after a day 3 transfer.

This large dataset makes it possible to distinguish broad statistical patterns that are generally applicable. KIDScore D3 is designed as a deselection model. This means that embryos ranked low by the model have a statistically low chance of implanting.

In comparison, embryos ranked high by the model have a statistically higher chance of implanting.

As KIDScore D3 is based solely on morphokinetic information, morphology should always be considered as well.

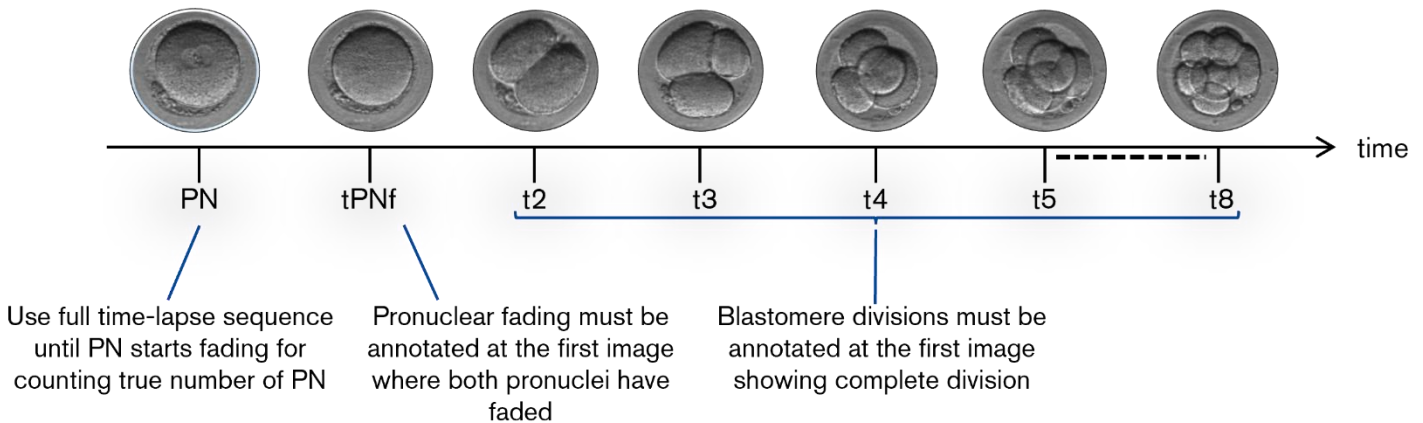


Safe borders for avoidance without the risk of excluding embryos with good potential

How to use

The use of KIDScore D3 is based on annotations performed on the Annotate page of the EmbryoViewer® software.

For KIDScore D3 to work as intended it is necessary to annotate a fixed set of variables. These variables can easily be annotated consistently:



Applying KIDScore D3 to an active culture dish

Select an active culture dish and go to the Compare & Select page of the EmbryoViewer software. From the model drop-down menu at the top of the page, select "KIDScore D3".



Each embryo will be assigned a score from 0 to 5 based on the annotations and the avoidance criteria of the model (See below).

Score	Interpretation
0	The embryo is not 2PN
1	Initial development was too fast or embryo displayed a direct cleavage from one to three cells
2	The embryo was very slow to develop
3	Embryo development was irregular and developmental pace increased from day 2 to day 3
4	Embryo development was irregular and developmental pace slowed down from day 2 to day 3 (And/or) The number of cells annotated at 66 hpi was less than eight
5	The embryo passed all of the avoidance criteria included in the model