



Quantifying cell confluency

OBJECTIVE

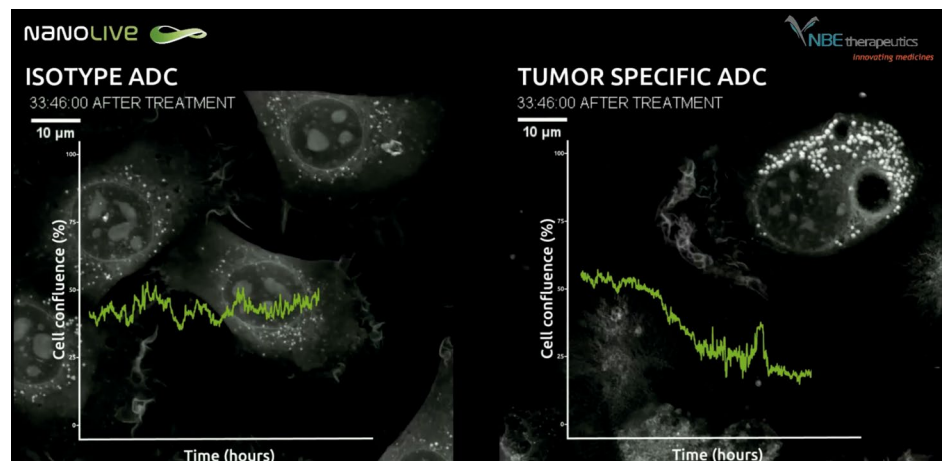
Quantifying cell confluency, a proxy for the health of a cell population (i.e. whether it is proliferating or in decline), is critical for evaluating and comparing the outcome of different experimental treatments. Typically, confluency is calculated as the percentage of surface occupied by cells in the field of view. If cells are non-motile, and/or a snapshot (i.e. single time-point) comparison is required, then this task is easy, but this is certainly not the case for complex time-lapse experiments involving motile cells. Nanolive have developed a simple, intuitive and user-friendly tool for quantifying and visualizing changes in cell confluency across time and between multiple treatments.

EXPERIMENTAL APPROACH

To test the efficacy of the tool, we applied it to an existing dataset where rapid cell death was observed over numerous hours in one treatment, but not the other. The experiment, which was conducted in conjunction with Swiss biotech company NBE Therapeutics, was designed to test the success of Antibody Drug Conjugate (ADC) products against cancer cell lines (for more information read our dedicated blog post [here](#)).



Scan me to watch the video or
click [here](#)!



EVALUATION

- The pipeline is fast and easy to run, requiring no prior experience or training.
- It can detect very small changes in confluency with high precision, as can be seen in the video on the right, making it possible to compare experimental treatments in a robust, quantitative manner.
- It creates attractive, fully customizable graphs that are easy to adapt for presentations or publications.

Already a client? Contact our team to request the tool [here](#).

Want to become a client? Book a demonstration with your local Nanolive representative today [here](#)!