Cover letter

**Tissue Engineering of a human 3D in vitro tumor test system**

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The manuscript submitted introduces a novel three-dimensional (3D) *in-vitro* system for tumor models. The authors describe the multi-step set-up of such 3D tissue models, including the decellularization of porcine tissue as scaffold, the isolation of different tumor-associated primary cell types and bioreactor systems that allow static as well as dynamic culture conditions. The reasons why we think that our paper is a very good topic for the JOVE format is that we use very complex bioreactors in our work. So it would be much more catchy to see our bioreactors in a movie than to read a description of its construction plan and handling. Additionally, it would be very informative, to see the development, preparation as well as analysis of our 3D tumor test systems shown by a video. These short-takes of all of the steps during the tumor test tissue generation would illustrate our work optimally. We think that the new field of tissue engineering in developing test systems would be very suitable for being portrayed in your journal. Visualizing the individual experimental steps will render the topic accessible for scientists from different fields of study.

Human in-vitro tumor models will play a major role in future personalized therapeutic strategies and will have a significant impact on tumor drug research by providing a controlled environment mimicking human conditions. Additionally, *in-vitro* tumor models will help to reduce the need for animal testing.

The authors Jenny Reboredo and Thomas Schwarz worked as engineers on the development and construction of the bioreactors. The authors Antje Appelt and Sebastian Schürlein established the cell isolation and culture protocols. Corinna Moll applied the system for the establishment of a human nerve sheath tumor model under the supervision of Sarah Nietzer. Jenny Reboredo and Corinna Moll contributed equally to the work; Jenny Reboredo is listed as corresponding author.