Review of: "3D Bioprinted perfusable and vascularized breast tumor model for dynamic screening of chemotherapeutics and CAR-T cells"

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Potential competing interests: The author(s) declared that no potential competing interests exist.

The vascularized model created here is very nice. I would, however, consider avoiding the phrase “for the first time” when speaking of it in the MS, since several vascular tumor models have already been created.
I am concerned about MDA-MB-231 being widely cited as triple negative, yet targeted with a CAR based on the anti HER2 Mab 4D5. This could partly explain why anti HER2 CAR T cells exert only a small effect. (The 3 Million CAR T cells used here would usually eradicate even a 1 cm3 HER2+ tumor in immunodeficient mice.). At the same time, the effect here is greater than that of the CD19-targeted control. So I would consider checking HER2 mRNA and protein levels in the various cells of the model, as well as quantifying the expression of the CAR on the T cells.
Also, expansion of the T cells is mentioned twice, 10-12 vs 12-20 days, this needs to be resolved, furthermore it should be considered that after IL-2 priming this is a very long time and may provide opportunity for apoptosis.
The differential effect of DOX on the cellular components of the model could be explored in more depth.