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# Manuscript Title: "Production of retroviral vectors in continuous high cell density culture"

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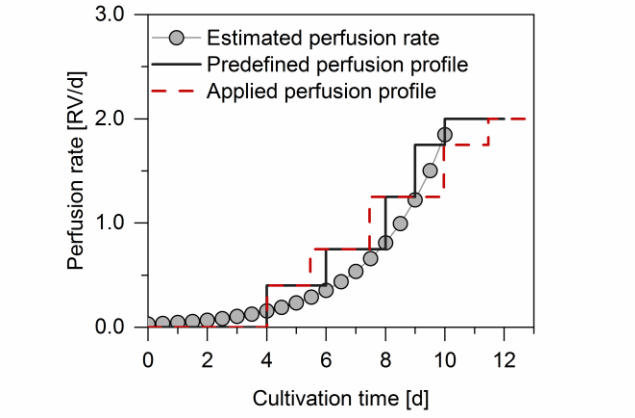


**Fig. S1 Estimated perfusion rate, predefined, and applied perfusion profile for cultivation of VPC-MSCV cells in a 1 L stirred tank bioreactor coupled to an alternating tangential flow filtration system.** For the calculation of the required perfusion rate, the maximum specific growth rate (0.0354 1/h) and the glucose uptake rate (3.62E–10 mmol/cell/h) of a batch previous cultivation (Fig. 2) was used. Considering the metabolite uptake rates, the glucose (40 mmol/L), and glutamine (8 mmol/L) concentration in the Dynamis medium, a cell specific perfusion rate (CSPR) of 60 pL/cell/d was calculated. Based on the expected cell growth and the CSPR the required perfusion rate was estimated. A predefined stepwise perfusion profile was chosen accordingly. During the cultivation, deviations to the expected cell growth were observed and the applied perfusion profile was adjusted accordingly.