The MICOM folder contains the essential information to be able to replicate the simulations of the community model. Essentially, inside the Scripts folder you can find the notebooks to carry out the model in a fluid way.

Community: Corresponds to the necessary code to create the community model, inside this document you will find the necessary instructions to make the changes to be made in the source code of MICOM 0.33.1 and to execute the community properly. In this file are included the instructions to perform the community with MICOM, before executing it is necessary to have at hand the XML files (.../MICOM/Input_files) corresponding to the 3 subpopulations invasive (modelA.xml), reservoir (modelB.xml) and proliferants (modelC.xml). The simulation results can be found in the folder (.../MICOM/Output_files/csv_files/supplementary_file_1.xlsx).

Exchanges_Medium_PRI: To visualize the fluxes in a graphical way, we filtered the data from the supplementary_file1 file and with the VMH database (https://www.vmh.life/) we assigned the metabolite name corresponding to its reaction and created the table (PRI) inside supplementary_file1. The notebook includes the instructions to create a heatmap to visualize the top 20 exchange reactions with the extracellular medium up to the figures available in (.../MICOM/Plots).

KO_Community: Contains the code necessary to generate K.O. reaction by reaction using the COBRA Toolbox package.

Gradient_Community and OxygenDown: These are two Notebooks that contain the necessary information to simulate an oxygen gradient to the model in which the oxygen transport fluxes are restricted and how to visualize the results (some metabolites). The files needed to replicate OxygenDown can be located at (...MICOM/Output_files/csv_files/supplementary_file2).