

- 'OUR' which denotes oxygen utilization rate and

- 'PH.PV' which denotes fermenter pH,

in the cultivation,

b) determine the current glucose concentration in the cultivation medium using the measured values from a) by means of a data-driven model for the mammalian cell cultivation, which was generated using a feature matrix comprising the bioreactor process variables 'Time', 'CHT.PV', 'ACOT.PV', 'FED2T.PV', 'GEW.PV', 'CO2T.PV', 'ACO.PV', 'AO.PV', 'N2.PV', 'LGE.PV', 'CO2.PV', 'FED3T .PV', 'OUR' and 'PH.PV',

and

c) adding glucose until the target value is reached if the current glucose concentration from b) is lower than the target value, and thus adjusting the glucose concentration to a target value,

wherein the mammalian cell expresses and secretes an antibody.

In one example, the model is generated using the random forest method.

In one example, the training dataset comprises at least 10 cultivation runs, preferably at least 60 cultivation runs.

In one example, the model is obtained with a training dataset that includes cultivation runs of mammalian cells that express a complex IgG, i.e. an antibody that comprises a different form than a wild-type Y-shaped full length antibody, e.g. by comprising additional domains, such as one or more Fabs. In one example, the training dataset also contains cultivation runs of mammalian cells that express standard IgG, i.e. a Y-shaped wild-type-like antibody without additional or deleted domains.