INFLUENCE OF CARBON AND NITROGEN SOURCES IN THE PRODUCTION AND INTEGRITY OF OUTER MEMBRANE VESICLES (OMV) FROM *Neisseria meningitidis* SEROGROUP B

<u>Sílvia Santos^{1,2}</u>, Júlia Baruque Ramos³, Ivo Lebrun², Sandra A. Barreto², Sylvia M. Carneiro², Martha Massako Tanizaki², Vera C.B.C. Gebara², Rocilda Perazzini Furtado Schenkman².

 ¹Universidade de São Paulo, Pós-Graduação Interunidades em Biotecnologia, Avenida Prof. Lineu Prestes, 1730 Edifício ICB-IV – Ala Norte – sala 03,
²Instituto Butantan. Av. Vital Brazil, 1500 ³Universidade de São Paulo (EACH), Av. Arlindo Bettio, 1000, São Paulo, Brasil. E-mail: <u>silviasantos@butantan.gov.br</u>

Outer membrane vesicles (OMV) from *N. meningitidis* B expressing iron regulated proteins (IRP) are the main antigen against the respective meningoccocal disease. They are used as antigen for vaccine production. The cultivations were carried out in Catlin medium without iron and double initial concentrations of lactate and aminoacids. Process conditions were: 7 L bioreactor, 36°C, 0.5 atm, overlay air 1 L/min, agitation: 250 - 850 rpm and O₂ control at 10%, 20 hs. Determinations performed were: biomass (optical density and dry weight); protein concentration (Lowry's method); RP presence (SDS-PAGE); lactate (enzymatic analyzer); glycerol and aminoacids (HPLC) and electronic microscopy. The OMV liberation occur in the phase stationary. It starts when carbon and nitrogen sources were exhausted. The maximum OMV values in the late 162,3 mg/L. These results suggest that double initial concentrations of lactate and aminoacids enhanced antigen for vaccine production and no changed their integrity.

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