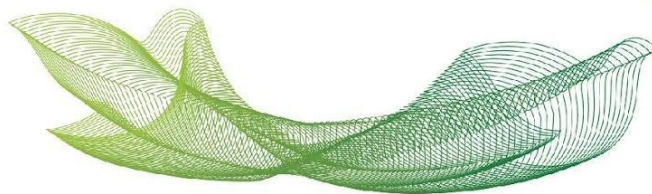


Tipo	Periódico
Título	Immune response induced in mice by a hybrid rPotD-PdT pneumococcal protein
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Resumo	<p><i>Streptococcus pneumoniae</i> is a human pathogen that colonizes the naso and/or oropharynx and can cause otitis, pneumonia, bacteremia and meningitis. To broaden the protection against pneumococcus, several pneumococcal proteins have been investigated as vaccine candidates. In this study we analyzed the immunological response induced by mouse subcutaneous immunization with a fusion of the Polyamine transport protein D (PotD) and a pneumolysin derivative (PdT), resulting in a hybrid rPotD-PdT protein. Immunization of mice with rPotD-PdT induced increased production of nitric oxide, indicating a higher innate immune response. In agreement, immunization of mice with the hybrid protein was more immunogenic than the individual proteins or their combination, eliciting higher antibody levels. The anti-rPotD-PdT IgG displayed increased binding onto the pneumococcal surface. Furthermore, the anti-rPotD-PdT antisera promoted superior opsonophagocytosis as compared with the other tested formulations. However, despite that the encouraging results <i>in vitro</i>, immunization with the hybrid was not sufficient to induce protection against sepsis with a highly virulent pneumococcal strain. taken together, the results suggest that hybrid proteins are an interesting strategy, able to promote improved immune responses, but the inclusion of other antigens may be necessary to promote protection against invasive infections caused by this bacterium.</p>
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# Educando para a paz