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Autores	T. R. Converso, C. Goulart, D. Rodriguez, M. Darrieux, L. C. C. Leite
Autor (es) USF	M. Darrieux
Autores Internacionais	
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Resumo	Pneumococcal surface protein A (PspA) is a widely studied pneumococcal protein, exposed at the surface of all strains. It is an important virulence factor, preventing complement deposition as well as inhibiting the lytic effects of lactoferrin over pneumococci. Several studies have investigated the use of PspA as a candidate in alternative pneumococcal vaccines, with great success. However, PspA presents sequence variability – there are six clades, grouped in three families – and PspAs within the same clade exhibit different levels of cross-reactivity. Therefore, the aim of this work was to select, from a panel of eight pneumococcal isolates expressing family 2 PspAs, the molecule with the broadest reactivity within this family. Antisera to these PspA fragments were initially screened by immunoblot against thirteen pneumococcal extracts; the three most cross-reactive antisera were tested for their ability to enhance the deposition of complement factor C3b on the bacterial surface and to promote their phagocytosis *in vitro*. PspA from strain P490 was the most effective, increasing phagocytosis of all but one pneumococcal isolate. Thus, this molecule was selected for inclusion in chimeric protein-based pneumococcal vaccines. In conclusion, the rational selection of cross-reactive molecules is an important step in the development of vaccines with broad coverage.
Fomento	