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(54) Title **PNEUMOCOCCAL VACCINE AND USES THEREOF**

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Patentkrav

1. Pneumokokkvaksine omfattende sakkarid fra serotyper 4, 6B, 9V, 14, 18C, 19F og 23F individuelt konjugert til CRM197 og minst én TLR-9-agonist som adjuvant, hvori den minst ene TLR-9-agonisten er et CpG-oligonukleotid som har nukleinsyresekvensen valgt fra gruppen bestående av: 5' TCGTCGTTTTTCGGTGCTTTT 3' (SEQ ID NO: 3), 5' TCGTCGTTTTTCGGTCGTTTT 3' (SEQ ID NO: 4), 5' TCGTCGTTTTGTCGTTTTGTCGTT 3' (SEQ ID NO: 5), 5' TCGTCGTTTCGTCGTTTTGTCGTT 3' (SEQ ID NO: 6) og 5' TCGTCGTTTTGTCGTTTTTTTCGA 3' (SEQ ID NO: 7) for anvendelse i forebygging eller behandling av sykdommer forårsaket av *S. pneumoniae*-infeksjon hos et immunkompromittert individ, hvori det immunkompromitterte individet lider av HIV-infeksjon eller ervervet immunsviktsyndrom (AIDS) og er under høyaktiv antiretroviral terapi (HAART).

2. Pneumokokkvaksinen for anvendelse ifølge krav 1, hvori CpG-oligonukleotidet er valgt fra gruppen bestående av: 5' T*C*G*T*C*G*T*T*T*T*T*C*G*G*T*G*C*T*T*T*T 3' (SEQ ID NO: 8), eller 5' T*C*G*T*C*G*T*T*T*T*T*C*G*G*T*C*G*T*T*T*T 3' (SEQ ID NO: 9), eller 5' T*C*G*T*C*G*T*T*T*T*G*T*C*G*T*T*T*T*G*T*C*G*T*T 3' (SEQ ID NO: 10), eller 5' T*C*G*T*C*G*T*T*T*C*G*T*C*G*T*T*T*T*G*T*C*G*T*T 3' (SEQ ID NO: 11), eller 5' T*C*G*T*C*G*T*T*T*T*G*T*C*G*T*T*T*T*T*T*T*C*G*A 3' (SEQ ID NO: 12)' hvori * refererer til en fosfortioat-binding.

3. Pneumokokkvaksinen for anvendelse ifølge krav 1 eller 2, omfattende fra 0,2 mg til 10 mg CpG-oligonukleotid.

4. Pneumokokkvaksinen for anvendelse ifølge krav 1-3, omfattende sakkarid fra serotyper 1, 3, 4, 5, 6A, 6B, 7F, 9V, 14, 18C, 19A, 19F og 23F individuelt konjugert til CRM197.

5. Pneumokokkvaksinen for anvendelse ifølge krav 1-4, hvori mengden av konjugat i hver vaksinedose er fra 2 til 100 µg.

6. Pneumokokkvaksinen for anvendelse ifølge krav 1-5, som inneholder hvert *S. pneumoniae* kapsulært sakkarid i en dose på mellom 1 og 5 µg sakkarid.

7. Pneumokokkvaksinen for anvendelse ifølge krav 1-6, som inneholder natriumklorid- og/eller natriumsuksinatbuffer som eksipienter.

8. Pneumokokkvaksinen for anvendelse ifølge krav 1-7, som omfatter alum, aluminiumhydroksid, aluminumfosfat eller aluminumsulfat som ytterligere adjuvant til den minst ene TLR-9-agonistadjuvanten.

9. Pneumokokkvaksinen for anvendelse ifølge krav 1 til 8, hvori det immunkompromitterte individet som skal vaksineres, er et voksent menneske på 55 år eller eldre.