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(71) Applicant *(for all designated States except US)*: **PHARMEXA A/S** [DK/DK]; Kogle Allé 6, DK-2970 Hørsholm (DK).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **BIRK, Peter** [DK/DK]; M & E Biotech A/S, Kogle Allé 6, DK-2970 Hørsholm (DK). **JENSEN, Martin, Roland** [DK/DK]; M & E Biotech A/S, Kogle Allé 6, DK-2970 Hørsholm (DK). **NIELSEN, Klaus, Gregorius** [DK/DK]; M & E Biotech A/S, Kogle Allé 6, DK-2970 Hørsholm (DK).

(74) Agent: **KOEFOED, Peter**; M & E Biotech A/S, Kogle Allé 6, DK-2970 Hørsholm (DK).

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ACTION

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(54) Title: NOVEL METHOD FOR DOWN-REGULATION OF AMYLOID

(57) Abstract: Disclosed are novel methods for combatting diseases characterized by deposition of amyloid. The methods generally rely on immunization against amyloidogenic proteins (proteins contributing to formation of amyloid) such as beta amyloid (Aβ). Immunization is preferably effected by administration of analogues of autologous amyloidogenic polypeptides, said analogues being capable of inducing antibody production against the autologous amyloidogenic polypeptides. Especially preferred as an immunogen is autologous Aβ which has been modified by introduction of one single or a few foreign, immunodominant and promiscuous T-cell epitopes while substantially preserving the majority of Aβ's B-cell epitopes. Also disclosed are nucleic acid vaccination against amyloidogenic polypeptides and vaccination using live vaccines as well as methods and means useful for the vaccination. Such methods and means include methods for identification of useful immunogenic analogues of the amyloidgonic proteins, methods for the preparation of analogues and pharmaceutical formulations, as well as nucleic acid fragments, vectors, transformed cells, polypeptides and pharmaceutical formulations.