

5 subject, wherein a qualitative pre-screen of said subject to detect a predisposition to cardiovascular or chronic inflammatory disease; a quantitative test on said subject if said qualitative pre-screen indicates a predisposition to cardiovascular or chronic inflammatory disease, that a blood sample is to be obtained from said human adult subject and genotyping to detect the presence of the SCARB I rs10846744 and the LAG3 rs870849 mutations; a
10 LAG3 expression profile is to be compiled from combined results of said qualitative prescreen and said quantitative test indicating risk that the subject has a deficiency in LAG3 expression when said qualitative pre-screen indicates a predisposition to cardiovascular or chronic inflammatory disease and the presence of the SCARB I rs10846744 or LAG3 rs870849 mutations are detected; and the medicament is to be administered to the subject
15 when said LAG3 expression profile indicates that the subject is at risk of a deficiency in LAG3 expression in form of a therapeutic regimen of sLAG3 in combination with one or more agents from a group including an anti-inflammatory agent, an anti-atherosclerotic agent, a statin, an anti-hyperlipidemic agent, and a PCSK9 inhibitor.

In one example, the method comprises a first step of qualitatively pre-screening a
20 subject for one or more risk factors for developing cardiovascular disease, a second step of quantitatively detecting a LAG3 protein deficiency in a sample from the subject, and a third

5 I claim:

1. Use of soluble lymphocyte activation gene 3 (sLAG3) as an adjuvant with at least one agent in the manufacture of a medicament for combination therapy of chronic inflammatory and cardiovascular disease in a human adult subject, wherein
10 a qualitative pre-screen of said subject to
detect a predisposition to cardiovascular or chronic inflammatory disease;
a quantitative test on said subject if said qualitative pre-screen indicates a
predisposition to cardiovascular or chronic inflammatory disease, that a blood sample is to be
obtained from said human adult subject and genotyping to detect the presence of the SCARB
15 I rs10846744 and the LAG3 rs870849 mutations;
a LAG3 expression profile is to be compiled from combined results of said qualitative
pre-screen and said quantitative test indicating risk that the subject has a deficiency in LAG3
expression when said qualitative pre-screen indicates a predisposition to cardiovascular or
chronic inflammatory disease and the presence of the SCARB I rs10846744 or LAG3
20 rs870849 mutations are detected; and
the medicament is to be administered to the subject when said LAG3 expression
profile indicates that the subject is at risk of a deficiency in LAG3 expression in form of a
therapeutic regimen of sLAG3 in combination with one or more agents from a group
including an anti-inflammatory agent, an anti-atherosclerotic agent, a statin, an anti-
25 hyperlipidemic agent, and a PCSK9 inhibitor.

- 5 2. The use of claim 1, wherein said quantitative test comprises that a quantitative test is
to be administered on a blood sample from said subject to confirm said LAG3 protein
deficiency.
3. The use of claim 1, wherein said quantitative test comprises both a genetic test and an
assay of a plasma sample from said subject for presence of low level expression of
10 LAG3 below 3400 pg/ml.
4. The use of claim 1, wherein said genotyping on said blood sample includes
amplifying at least a portion of a *SCARB1* or *LAG3* gene .
5. The use of claim 1, wherein the therapeutic regimen comprises that recombinant
15 human LAG3 is to be administered periodically.
6. The use of claim 5, wherein the anti-hyperlipidemic agent is probucol.
7. The use of claim 6, wherein probucol is to be administered periodically within a range
of from three to four months.
8. The use of claim 6, wherein probucol is to be administered periodically for a
20 remainder of said subject's lifetime.
9. The use of claim 1, further comprising that the said subject is monitored during said
administration to determine effect on LDL oxidation and plasma-HDL cholesterol and
plasma/serum cytokines.
10. The use of claim 9, wherein said monitoring comprises EKGs.

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