

5 subject, wherein a qualitative pre-screen of said subject's ~~medical or family history or~~
~~symptoms~~ 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
10 and the LAG3 rs870849 mutations; a 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
15 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-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's ~~medical or family history or symptoms~~ 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.

~~2. The use of claim 1, wherein said qualitative pre-screen of said subject comprises pre-screening a medical record.~~

~~3. The use of claim 1, wherein said qualitative pre-screen of said subject comprises pre-screening a family history.~~

4.2. 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.

5.3. 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 LAG3 below 3400 pg/ml.

~~6. The use of claim 1, wherein said quantitative genetic test is configured to detect a polymorphism in the coding sequence of the SCARB1 or LAG3 genes.~~

7.4. The use of claim ~~16~~, wherein said ~~quantitative test genotyping~~ on said blood sample includes amplifying at least a portion of a ~~SCARB1 or LAG3~~ SCARB1 or LAG3 gene ~~prior to identifying an allelic variant~~.

8.5. The use of claim 1, wherein the therapeutic regimen comprises that recombinant human LAG3 is to be administered periodically.

9.6. The use of claim ~~58~~, wherein the anti-hyperlipidemic agent is probucol.

10.7. The use of claim ~~69~~, wherein probucol is to be administered periodically within a range of from three to four months.

11.8. The use of claim ~~69~~, wherein probucol is to be administered periodically for a remainder of said subject's lifetime.

12.9. 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.

- 5 13.10. The use of claim 912, wherein said monitoring comprises ~~monthly safety labs~~
~~with comprehensive profiles and~~ EKGs.