

Claims

1. A method for assessing the risk of developing severe cutaneous adverse drug reaction (SCAR) in a patient, comprising the step of detecting the presence of at least one allele selected from the following:

- (a) HLA-B*3802 allele;
- (b) a combination of HLA-B*1301 allele and HLA-B*3901 allele, or
- (c) any combination thereof;

wherein the presence of the HLA-B*3802 allele indicates the patient has a higher risk of developing Stevens Johnsons Syndrome (SJS) or toxic epidermal necrolysis (TEN) induced by sulfasalazine compared to a patient without the corresponding HLA allele;

wherein the presence of HLA-B*1301 allele and HLA-B*3901 allele indicates the patient has a higher risk of developing the severe cutaneous adverse drug reaction (SCAR) that is Stevens Johnsons Syndrome (SJS), toxic epidermal necrolysis (TEN) or drug rash with eosinophilia and systemic symptoms (DRESS) induced by sulfasalazine compared to a patient without the corresponding HLA allele.

2. The method according to claim 1, further comprising detecting HLA-B*1502 allele in combination with HLA-B*3802 allele.

3. The method of claim 1, comprising the step of detecting HLA-B*3802 allele; HLA-B*1301 allele; HLA-B*3901 allele and optionally HLA-B*1502 allele.

4. The method according to claim 3, wherein the severe cutaneous adverse drug reaction (SCAR) that is Stevens Johnsons Syndrome (SJS), toxic epidermal necrolysis (TEN) or drug rash with eosinophilia and systemic symptoms (DRESS) induced by sulfasalazine compared to a patient without the corresponding HLA allele.

5. The method according to claim 1 or 2, wherein said HLA-B*1502 allele, HLA-B*3802 allele, HLA-B*1301 allele or HLA-B*3901 allele is detected in the DNA, RNA, proteins, cells or serum sample prepared from the peripheral blood of the patient.

6. The use of a reagent for detecting HLA-B*3802 allele, a combination of HLA-B*3901 allele and HLA-B*1301 allele or any combination thereof in the manufacture of a detection kit to evaluate the risk of developing severe cutaneous adverse drug reactions induced by sulfasalazine,

wherein the presence of the HLA-B*3802 allele indicates the patient has a higher risk of developing Stevens Johnsons Syndrome (SJS) or toxic epidermal necrolysis (TEN) induced by sulfasalazine compared to a patient without the corresponding HLA allele; wherein the presence of HLA-B*1301 allele and HLA-B*3901 allele indicates the patient has a higher risk of developing the severe cutaneous adverse drug reaction (SCAR) that is Stevens Johnsons Syndrome (SJS), toxic epidermal necrolysis (TEN) or drug rash with eosinophilia and systemic symptoms (DRESS) induced by sulfasalazine compared to a patient without the corresponding HLA allele.

7. The use according to claim 6, further comprising a reagent for detecting HLA-B*1502 allele in combination with a reagent for detecting HLA-B*3802 allele in the manufacture of the detection kit.

8. The use according to claim 6 or 7, wherein said kit comprises an oligonucleotide that specifically hybridizes to the nucleic acids of the HLA allele.

9. The use according to claim 6, comprising the reagent for detecting HLA-B*3802 allele; HLA-B*1301 allele; HLA-B*3901 allele and optionally HLA-B*1502 allele in the manufacture of the detection kit.

10. The use according to claim 9, wherein the severe cutaneous adverse drug reaction (SCAR) is Stevens Johnsons Syndrome (SJS), toxic epidermal necrolysis (TEN) or drug rash with eosinophilia and systemic symptoms (DRESS) induced by sulfasalazine compared to a patient without the corresponding HLA allele.