CLAIMS

1. Use of a composition comprising red blood cells containing a peptidic or proteic active principle for the preparation of a medicament for inducing, in a host, an immune tolerance to said peptidic or proteic active principle.

2. The use according to claim 1, wherein the red blood cells have been treated with BS3.

3. The use according to claim 1 or 2, wherein the active principle is a therapeutic peptide, polypeptide or protein that is efficient in treating a pathology, said active principle being contained in the red blood cells to induce the immune tolerance.

4. The use according to claim 3, wherein the therapeutic peptide, polypeptide or protein is an antibody or a fragment thereof, a clotting factor or a fragment thereof, an enzyme or a fragment thereof or a growth factor or a fragment thereof.

5. The use according to claim 3, wherein the active principle is an enzyme for use in Enzyme Replacement Therapy (ERT).

6. The use according to claim 5, wherein the active principle is a lysosomal enzyme.

7. The use according to claim 6, wherein the lysosomal enzyme is an enzyme for replacement therapy (ERT) in pompe disease (Glycogen storage disease type II), Fabry disease or Mucopolysaccharidoses disorders MPS I.

8. The use according to claim 6, wherein the lysosomal enzyme is selected from the group consisting of alphaglucosidase enzyme, laronidase and alphagalactosidase A and agalsidase alpha.

9. The use according to claim 3, wherein the active principle is a clotting factor to treat Haemophilia.

10. The use according to claim 9, wherein the clotting factor is Factor VII, Factor VIII or Factor IX.

11. The use according to claim 1 or 2, wherein the active principle is a peptidic or proteic autoantigen and the composition of the red blood cells containing said autoantigen is for use in treating an autoimmune disease.

12. The use according to claim 11, wherein the active principle is against Rheumatoid Arthritis (RA), Multiple Sclerosis (MS), Juvenile diabete, Uveitis, an inflammatory bowel disease, Crohn's disease, ulcerative colitis, systemic lupus erythematosus, psoriasis, or acquired myasthenia gravis.

13. The use according to claim 11, wherein the active principle is myelin basic protein against Multiple Sclerosis (MS), the Beta-cell antigen, the pro-insuline, the insuline-like growth factor-2 (IGF2) or mixtures thereof against Juvenile diabete, the retinal-S antigen

against Uveitis, or acetyl choline receptor against acquired myasthenia gravis.

14. The use according to claim 1 or 2, wherein the active principle is a transplantation peptidic or proteic antigen, and the composition of red blood cells containing said antigen is for use against graft rejection, preferably kidney, heart or liver graft rejection.

15. The use according to claim 1 or 2, wherein the peptide, polypeptide or protein inducing an allergic reaction is of food origin.

16. The use according to any one of the preceding claims, wherein the red blood cells (1) contain the active principle and (2) are in the form of an immune complex with an immunoglobulin, preferably an IgG, which recognizes an epitope at the surface of the red blood cells, so as to promote liver targeting.

17. The use according to Claim 16, wherein the red blood cells form an immune complex with an anti-rhesus or anti-glycophorin A or anti-CR1 antibody.

18. The use according to any one of the preceding claims, wherein the red blood cells are chemically treated to target the liver.

CLAIMS:

1. Use of a composition comprising red blood cells containing a peptidic or proteic active principle for the preparation of a medicament for inducing, in a host, an immune tolerance to said peptidic or proteic active principle.

2. Use according to claim 1, wherein the red blood cells have been treated with BS3.

3. Use according to claim 1 or 2, wherein the active principle is a therapeutic peptide, polypeptide or protein that is efficient in treating a pathology, said active principle being contained in the red blood cells to induce the immune tolerance.

4. Use according to claim 3, wherein the therapeutic peptide, polypeptide or protein is an antibody or a fragment thereof, a clotting factor or a fragment thereof, an enzyme or a fragment thereof or a growth factor or a fragment thereof.

5. Use according to claim 3, wherein the active principle is an enzyme for use in Enzyme Replacement Therapy (ERT).

6. Use according to claim 5, wherein the active principle is a lysosomal enzyme.

7. Use according to claim 6, wherein the lysosomal enzyme is an enzyme for replacement therapy (ERT) in pompe disease (Glycogen storage disease type II), Fabry disease or Mucopolysaccharidoses disorders MPS I.

8. Use according to claim 6, wherein the lysosomal enzyme is selected from the group consisting of alphaglucosidase enzyme, laronidase and alphagalactosidase A and agalsidase alpha.

9. Use according to claim 3, wherein the active principle is a clotting factor to treat Haemophilia.

10. Use according to claim 9, wherein the clotting factor is Factor VII, Factor VIII or Factor IX.

11. Use according to claim 1 or 2, wherein the active principle is a peptidic or proteic autoantigen and the composition of the red blood cells containing said autoantigen is for use in treating an autoimmune disease.

12. Use according to claim 11, wherein the active principle is against Rheumatoid Arthritis (RA), Multiple Sclerosis (MS), Juvenile diabetes, Uveitis, an inflammatory bowel disease, Crohn's disease, ulcerative colitis, systemic lupus erythematosus, psoriasis, or acquired myasthenia gravis.

13. Use according to claim 11, wherein the active principle is myelin basic protein against Multiple Sclerosis (MS), Beta-cell antigen, pro-insuline, insulin-like growth factor-2 (IGF2) or mixtures thereof against Juvenile diabetes, retinal-S antigen against Uveitis, or acetyl choline receptor against acquired myasthenia gravis.

14. Use according to claim 1 or 2, wherein the active principle is a transplantation peptidic or proteic antigen, and the composition of red blood cells containing said antigen is for use against graft rejection.

15. Use according to claim 14, wherein the graft rejection is kidney, heart or liver graft rejection.

16. Use according to claim 1 or 2, wherein the peptide, polypeptide or protein inducing an allergic reaction is of food origin.

17. Use according to any one of the preceding claims, wherein the red blood cells (1) contain the active principle and (2) are in the form of an immune complex with an immunoglobulin, which recognizes an epitope at the surface of the red blood cells, so as to promote liver targeting.

18. Use according to claim 17, wherein the immunoglobulin is an IgG immunoglobulin.

19. Use according to claim 17 or 18, wherein the red blood cells form an immune complex with an anti-rhesus or anti-glycophorin A or anti-CR1 antibody.

20. Use according to any one of the preceding claims, wherein the red blood cells are chemically treated to target the liver.