

Research and development of the effective components of panaxadiol saponin as new Chinese patent medicine for treating hemocytopenia

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At present, pancytopenia (hemocytopenia) such as primary immune thrombocytopenia (ITP), aplastic anemia and agnogenic leukocytopenia were often treated by glucocorticoids, androgen or immunosuppressive agents, but the response to these treatments has not been always satisfactory. Besides they may cause serious side effects. Our research has identified a biological active component, panaxadiol saponins components (PDS-C) isolated from Chinese ginseng extract, and formulated into capsules. The composition and content of PDS-C have been defined 92.44% in purity by HPLC-UV-ESI-MS and HPLC using specific monomers of ginsenosides as reference standards. PDS-C is very efficacious for treating mice and rats with ITP and aplastic anemia, and myelosuppression caused by chemotherapy or radiation. Our animal model studies and cell biology and molecular biology experiments demonstrated that PDS-C possessed dual activities, namely that of promoting proliferation and differentiation of hematopoietic progenitor cells, and that of regulating the immune function. We successfully obtained approval from SFDA in 2010 to conduct clinical trials of PDS as class-five new Chinese patent medicine. Phase II clinical trials of PDS-C were carried out in treatment of ITP and agnogenic leukocytopenia. PDS-C as a new Chinese patent medicine has been successfully transferred to industry for its commercialization. We believe that PDS-C is effective and safe in the treatment of refractory hemocytopenia. The advantages are: effective in small doses, convenient to use because of its oral administration, its lack of side effects, it could be used alone or in combination with pharmacological agents, which improve the efficacy and decrease side effects.

Biography

Rui-lan Gao has completed master degree at the age of 30 years from Zhejiang Medical University in China and completed postdoctoral studies from University of New South Wales in Australia. Now she is a Professor in Hematology, Head of Hematology Research Institution in The First Affiliated Hospital of Zhejiang Chinese Medical University in China. She has published more than 60 papers in journals. She is a vice Chairwoman of Hematology Committee of the National Integrative Medicine Association in China, and a Chairwoman of Hematology Committee of the Zhejiang Provincial Association of Integrative Medicine. She is a team leader of the project "Research and development panaxadiol saponin as new Chinese patent medicine".

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