

Haematologica  
HAEMATOL/2019/216713  
Version 4

Factor IX alteration p.Arg338Gln (FIX Shanghai) potentiates FIX  
clotting activity and causes thrombosis

Wenman Wu, Lin Xiao, Xi Wu, Xiaoling Xie, Ping Li, Changming Chen,  
Zhaoyue Zheng, Jiangang Ai, Alexander Valencia, Birong Dong, Qiulan  
Ding, Biao Dong, and Xuefeng Wang

Disclosures: W.W. designed experiments, analyzed data, and wrote the paper; L.X. execute animal work, analyzed data and wrote the paper; P.L. and Z.Z. prepared AAV vectors; X.X, C.C, J.A expressed recombinant protein and performed function assay; A.V. wrote the paper; B.D. planed the experiments of AAV vectors; X.W performed the clotting function assays and FIX antigen determination of patient; X.W and Q.D. established the diagnosis of the patients, over sighted experiments and wrote the paper; B.D. planned and conducted the experiments of AAV vectors and wrote the paper. This work was supported by NSFC 81670130, W.W; NSFC 81570115, X.W; NSFC 81570114, Q.D; NSFC 81571792, B.D.

Contributions: W.W. designed experiments, analyzed data, and wrote the paper; L.X. execute animal work, analyzed data and wrote the paper; P.L. and Z.Z. prepared AAV vectors; X.X, C.C, J.A expressed recombinant protein and performed function assay; A.V. wrote the paper; B.D. planed the experiments of AAV vectors; X.W performed the clotting function assays and FIX antigen determination of patient; X.W and Q.D. established the diagnosis of the patients, over sighted experiments and wrote the paper; B.D. planned and conducted the experiments of AAV vectors and wrote the paper.