

Supplementary Material

Table 1 Population pharmacokinetics models integrated into the clinical decision support tool

Study (year)	Factor	Formulations
Abrantes ¹ (2017)	VIII	ReFacto, ReFacto AF, Xyntha
Zhang ² (2017)	VIII	rVIII-SingleChain
Garmann ³ (2017)	VIII	BAY 81-8973
Hazendonk ⁴ (2016)	VIII	Kogenate FS, Helixate FS, Advate, Recombinate, Refacto AF, Aafact, Hemofil M
Björkman ⁵ (2009)	VIII	ImmuNate, Monoclote, Monoclote-P, Octonativ-M, Kogenate, Recombinate, ReFacto
Björkman ⁶ (2017)	VIII	Advate
Bolon-Larger ⁷ (2007)	VIII	Not specified (plasma-derived or rDNA factor VIII concentrate)
Suzuki ⁸ (2016)	IX	Not specified (recombinant factor IX)
Brekkan ⁹ (2016)	IX	AlphaNine, Factor IX Grifols, Immunine, Octanine, Nanotiv, Preconativ, Mononine
Diao ¹⁰ (2014)	IX	Not specified
Björkman and Ahlén ¹¹ (2017)	IX	Replenine-VF, Preconativ, Nanotiv, Mononine, Replenine, Alphanine
Björkman ¹² (2017)	IX	Not specified (recombinant factor IX)

Supplement References

- 1 Abrantes JA, Nielsen EI, Korth-Bradley J, Harnisch L, Jönsson S. Elucidation of factor VIII activity pharmacokinetics: a pooled population analysis in patients with hemophilia a treated with moroctocog alfa. *ClinPharmacolTher* 2017;102(06):977–988
- 2 Zhang Y, Roberts J, Tortorici M, et al. Population pharmacokinetics of recombinant coagulation factor VIII-SingleChain in patients with severe hemophilia A. *J ThrombHaemost* 2017;15(06):1106–1114
- 3 Garmann D, McLeay S, Shah A, Vis P, Maas Enriquez M, Ploeger BA. Population pharmacokinetic characterization of BAY 81-8973, a full-length recombinant factor VIII: lessons learned - importance of including samples with factor VIII levels below the quantitation limit. *Haemophilia* 2017;23(04):528–537
- 4 Hazendonk H, Fijnvandraat K, Lock J, et al; “OPTI-CLOT” study group. A population pharmacokinetic model for perioperative dosing of factor VIII in hemophilia A patients. *Haematologica* 2016;101(10):1159–1169
- 5 Björkman S, Folkesson A, Jönsson S. Pharmacokinetics and dose requirements of factor VIII over the age range 3–74 years: a population analysis based on 50 patients with long-term prophylactic treatment for haemophilia A. *Eur J ClinPharmacol* 2009;65 (10):989–998
- 6 Björkman S, Oh M, Spotts G, et al. Population pharmacokinetics of recombinant factor VIII: the relationships of pharmacokinetics to age and body weight. *Blood* 2012;119(02):612–618
- 7 Bolon-Larger M, Chamouard V, Bressolle F, Boulieu R. A limited sampling strategy for estimating individual pharmacokinetic parameters of coagulation factor VIII in patients with hemophilia A. *Ther Drug Monit* 2007;29(01):20–26
- 8 Suzuki A, Tomono Y, Korth-Bradley JM. Population pharmacokinetic modelling of factor IX activity after administration of recombinant factor IX in patients with haemophilia B. *Haemophilia* 2016;22(05):e359–e366
- 9 Brekkan A, Berntorp E, Jensen K, Nielsen EI, Jönsson S. Population pharmacokinetics of plasma-derived factor IX: procedures for dose individualization. *J ThrombHaemost* 2016;14(04): 724–732
- 10 Diao L, Li S, Ludden T, Gobburu J, Nestorov I, Jiang H. Population pharmacokinetic modelling of recombinant factor IX Fc fusion protein (rFIXFc) in patients with haemophilia B. *ClinPharmacokinet* 2014;53(05):467–477
- 11 Björkman S, Ahlén V. Population pharmacokinetics of plasma-derived factor IX in adult patients with haemophilia B: implications for dosing in prophylaxis. *Eur J ClinPharmacol* 2012;68(06): 969–977
- 12 Björkman S. Population pharmacokinetics of recombinant factor IX: implications for dose tailoring. *Haemophilia* 2013;19(05): 753–757