

Supplemental Table 31. The 20 most relevant pathways sorted by p-value for WFA intervention.

Top level pathway	Pathway name	Reactome Entities				Reactions		Gene
		found	ratio	p-value	FDR *	found	ratio	
Hemostasis	Formation of Fibrin Clot (Clotting Cascade)	7 / 135	0.007	9.39e-11	2.33e-08	32 / 61	0.004	F2, KNG1, FGB, PROS1, FGG, SERPINC1
Hemostasis	Intrinsic Pathway of Fibrin Clot Formation	5 / 51	0.003	2.66e-09	3.30e-07	13 / 24	0.002	F2, PROS1, KNG1, SERPINC1
Metabolism of proteins	Regulation of Insulin-like Growth Factor (IGF) transport and uptake by Insulin-like Growth Factor Binding Proteins (IGFBPs)	7 / 254	0.013	7.25e-09	5.95e-07	3 / 14	9.40e-04	C4A, FGG, SERPINC1, CP, KNG1, F2, PLG
Hemostasis	Common Pathway of Fibrin Clot Formation	5 / 92	0.005	4.94e-08	3.07e-06	19 / 29	0.002	F2, PROS1, FGB, SERPINC1, FGG
Metabolism of proteins	Post-translational protein phosphorylation	5 / 107	0.006	1.04e-07	5.10e-06	1 / 1	6.72e-05	C4A, KNG1, CP, SERPINC1, FGG
Immune System	Regulation of Complement cascade	6 / 231	0.012	1.45e-07	5.95e-06	20 / 42	0.003	C1R, LRG1, C4A, PROS1, F2
Immune System	Complement cascade	6 / 240	0.013	1.81e-07	6.35e-06	29 / 72	0.005	C1R, LRG1, C4A, PROS1, F2
Hemostasis	Platelet degranulation	5 / 177	0.009	1.23e-06	3.81e-05	1 / 11	7.39e-04	FGB, PLG, FGG, PROS1, KNG1
Hemostasis	Response to elevated platelet cytosolic Ca ²⁺	5 / 232	0.012	4.57e-06	1.23e-04	1 / 14	9.40e-04	FGB, PLG, FGG, PROS1, KNG1
Immune System	Innate Immune System	11 / 3,145	0.165	1.67e-04	0.004	52 / 738	0.05	C1R, FGB, LRG1, C4A, FGG, PROS1, F2, HP
Hemostasis	Platelet activation, signaling and aggregation	6 / 822	0.043	1.97e-04	0.004	19 / 119	0.008	F2, KNG1, FGB, PLG, FGG, PROS1

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Hemostasis	Hemostasis	9 / 2,272	0.119	3.63e-04	0.007	68 / 342	0.023	F2, JCHAIN, PROS1, FGB, KNG1, SERPINC1, FGG, PLG
Metabolism of proteins	Transport of gamma-carboxylated protein precursors from the endoplasmic reticulum to the Golgi apparatus	2 / 26	0.001	3.82e-04	0.007	2 / 9	6.05e-04	F2, PROS1
Metabolism of proteins	Gamma-carboxylation of protein precursors	2 / 28	0.001	4.43e-04	0.007	2 / 9	6.05e-04	F2, PROS1
Immune System	Initial triggering of complement	3 / 138	0.007	4.55e-04	0.007	6 / 21	0.001	C1R, C4A
Disease	IRAK4 deficiency (TLR2/4)	2 / 29	0.002	4.75e-04	0.007	2 / 2	1.34e-04	FGB, FGG
Metabolism of proteins	Removal of aminoterminal propeptides from gamma-carboxylated proteins	2 / 35	0.002	6.89e-04	0.008	2 / 9	6.05e-04	F2, PROS1
Signal Transduction	GRB2:SOS provides linkage to MAPK signaling for Integrins	2 / 36	0.002	7.28e-04	0.008	2 / 2	1.34e-04	FGB, FGG
Disease	Signaling by high-kinase activity BRAF mutants	2 / 37	0.002	7.69e-04	0.008	4 / 6		FGB, FGG
Metabolism of proteins	Gamma-carboxylation, transport, and	2 / 37	0.002	7.69e-04	0.008	6 / 27	0.002	F2, PROS1

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	amino-terminal cleavage of proteins								
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