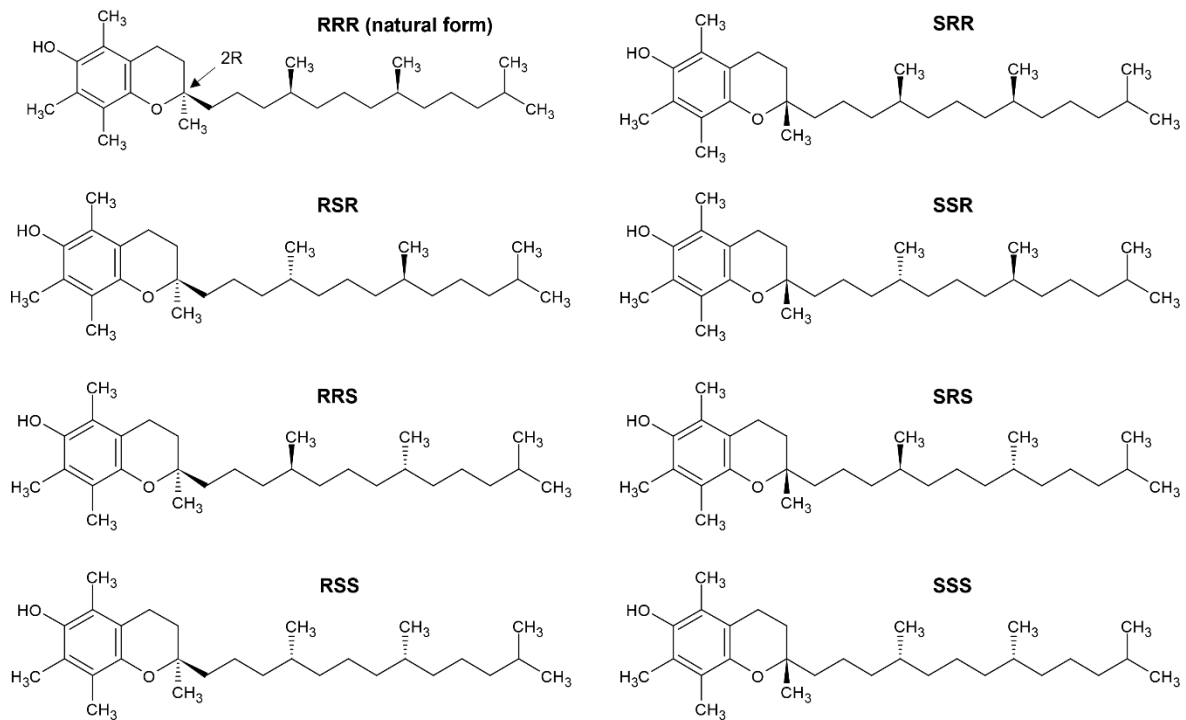
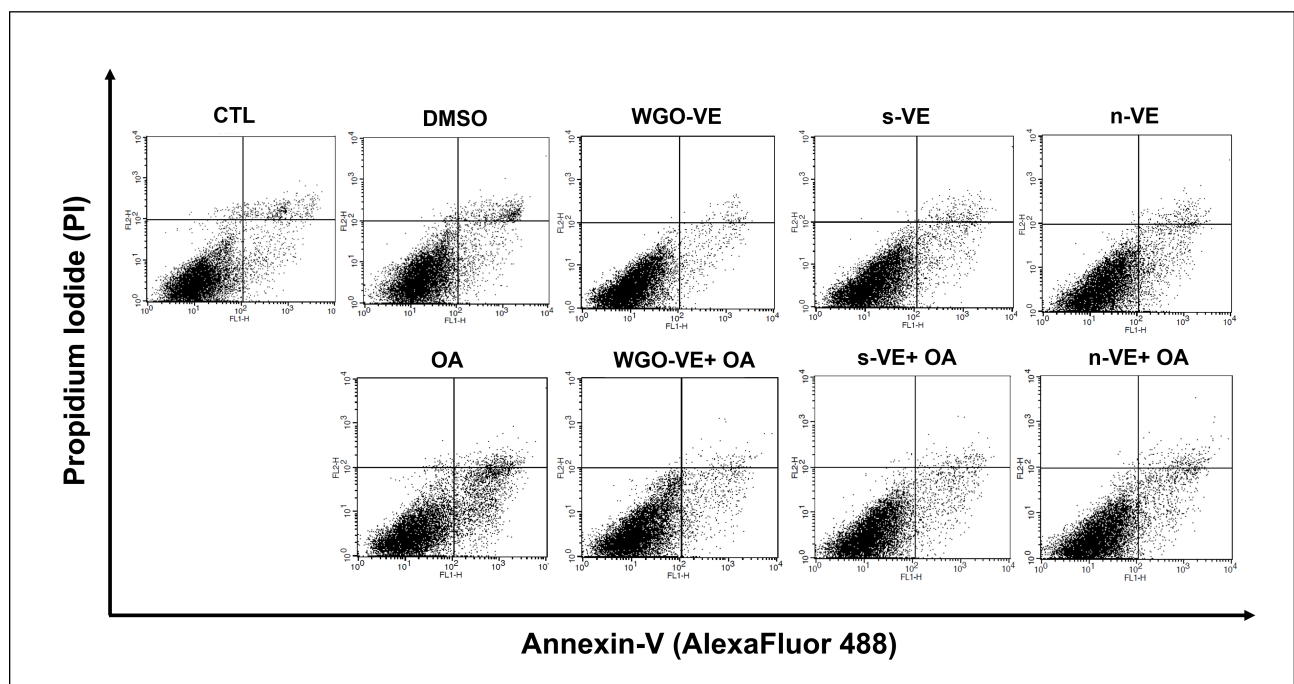


Supplementary materials



Suppl. Figure S1. Vitamin E stereoisomers of *all-rac*- $\alpha$ -tocopherol.



Supplementary Figure S2. Representative FACS analysis scatter plots with gating of apoptotic (Annexin-V positive) and necrotic cells (PI positive).

Genes in common to all treatments (#31)	Genes in common between sVE and WGO-VE (#7)	Genes in common between sVE and nVE (#15)	Genes in common between nVE and WGO-VE (#48)	Genes exclusively modulated by sVE (#73)	Genes exclusively modulated by WGO-VE (#56)	Genes exclusively modulated by nVE (#179)		
AGAP2	NR4A2	ARRB2	AURKB	FXYD2	ABCD1	IL1RL2	EZH2	EGR3
AKR1B10	CAMKK2	CCN2	SERPINB2	DSPP	ADIPOQ	MMP2	PDCD1LG2	CHI3L1
AREG	DUSP1	CTPT	NFE2	PROX1	ADRA1A	TRAF2	APOE	CD300A
ASIC1	LCN2	A2M	TPX2	BNIP3	APOL6	TPD52	IL2	FOXO1
BDNF	FABP5	EGLN3	GLIPIR1	AIFM1	ATP7B	APCDD1	APOH	DUSP10
CD14	IRS2	TREM2	STC1	PRKAA2	BCR	SFRP2	ATP5F1A	ITIH4
CREB3L3	FGFR4	GHR	IKBKG	CXCL3	BTX	NUAK1	PGGT1B	TXNIP
DAPK2		IGFBP3	GSN	RG55	C1QTNF3	PPARGC1A	PDX1	TRAF1
EREG		LBP	IRF1	TP53	CAVIN3	MST1R	FKBP5	TRPC7
FOXO4		MAP15	HMMR	GDF15	CCL23	RNASE1	PKFB3	DTX1
GPER1		HTR3A	CXCL13	HMOX1	CLEC12A	SLFN11	CDK1	HLA-DQA1
GZMB		SOX2	FGFR2	FCGR2A	CYP17A1	SOCS2	CLCN7	PRKAA1
HIPK1		CPB2	BCL2L11	ZC3H12A	DRD3	IL13RA2	POU2AF1	IL6
IGFBP1		IQGAP2	PCLAF	CLUH	F11	E1F2AK2	SPARC	IL7
IGFBP5		GFAP	TRPC5	ERG	F2	IDO1	PRMT1	mir-221
LIF			MAP3K5	PDK1	FHIT	FAF1	PLAC8	PTPN6
LZT51			SMO	IL23A	HINT2	MMP28	ACBD5	AURKA
MAP3K14			UPP1	AMBRA1	HIVEP3	MMP7	ALB	IL36B
MMP13			TMEM38A	PDE1C	IL12A	BMF	MGAT1	CD70
NDRG1			SELL	CCR2	KCNH1	HNF1A	TNFSF10	WEE1
ODC1			ITGB4	AMOTL1	KLF2	FNDC4	SAA2	PNPLA2
PK4			DRAM1	BLM	KLHL22	PRKCG	CLCA2	CXCL17
PLIN2			TLR5	PLA2G4A	MAP3K8	FGL1	SELPLG	RRM1
POSTN			DPP4	DRD2	MBP	RARA	NPS	HCLS1
PPBP			NT5E	LAPTM5	MEF2D	PRPF4	PPFIA4	S100A9
RASSF5			CENPA	EGLN1	MFSD2A	EGR2	F3	CSF2
S100A4			DNA2	GRP	MMP8	IL1A	MFNG	S100G
S1PR1			ACTA2	CRH	MSH3	MET	RUFY4	THBD
STING1			BCL2	ADM	MYC	CENPE	SERPING1	KLKB1
TNFRSF11B			RRM2	UCN3	NEDD9	FERMT1	MICOS10-NBL1/NBL1	CXCR5
VDR			PIK3CD	GLI1	NLRP4	PPARA	KIF11	SLC7A2
			HMGAI	HCA2	NOTCH1	NOG	YARS1	HP
			B4GALT1	PLEKHF1	NR1I2	BRCA2	RALGDS	XRCC2
			H2AX	SUMF1	ORMDL3	MPO	PEG10	
			TGFB1	TFEB	P2RY1	ZBTB16	MLL11	
			S100A8	CD200R1	PDCD4	PKM	NKX2-2	
			THBS2	CYP2E1	PIK3C2B	GPR37	HPGD	
			BUB1	GALP	PLG	VIM	APOL1	
			DAPK1	TAC1	PLK1	TIRAP	DNMT3B	
			KLRD1	TRPC1	PRKCQ	MAOB	MT-ND3	
			LPAR2	FANCM	PSEN2	FASN	PDE5A	
			ANGPT1	FGA	PSMB9	SCNN1A	TGFB1	
			RIPK2	ALDH3A1	PYCARD	BRCA1	F7	
			BUB1B	RASD2	RGN	SHH	NRSA2	
			MAD2L1	CLU	RPS6KB1	CD27	IL18R1	
			PGR	PPP2R1A	SORL1	GPX7	CSAR2	
			FANCD2	ERRF1	STIM1	SCD	IRS1	
			CDC48	RAG2	STK24	GSTM1	GA6	
				SLC27A4	THRB	CSAR1	SERPINA3	
				PRKD1	TNFRSF1B	BBS12	SLC14A1	
				ATR	TRIB3	LRR1	MFN2	
				RAPGEF3	TRIM28	FPR2	ASIC3	
				NF2	TRIM62	RARRES2	LHX2	
				NRG1	TRPC4	BARD1	CSF1R	
				BCL2L13	TSC2	FYB1	RNASEL	
				SIK1/SIK1B	XPO1	CA9	BCL11B	
				LRRK2		NUDT1	CTSV	
				VIP		GPR174	CLDN2	
				CCL28		SUV39H1	MMP10	
				POU3F2		PRKAB1	BACH2	
				LTF		SCG2	TSC22D3	
				HDC		BIRC5	PPARGC1B	
				MID2		PLAT	SNAI2	
				KDM4B		GNAS	AKR1B1	
				EPM2A		TRIM27	MCM8	
				TRH		ELP1	CYTIP	
				TRPC3		RGCC	FOLR1	
				RUNX1		IL1B	AGT	
				MTTP		KDM2B	PJVK	
				IGF2BP1		ACVR1C	PBK	
				SRC		DOK1	BCL2L2	
				ANGPT2		FOXO1	NCAPG	
				PTPRO		SGCA	TWIST1	

**Suppl. Table S1. Complete list of genes modulated by the different forms of VE investigated in the study.**

The list corresponds to the Venn Diagram analysis shown in Figure 1D.

