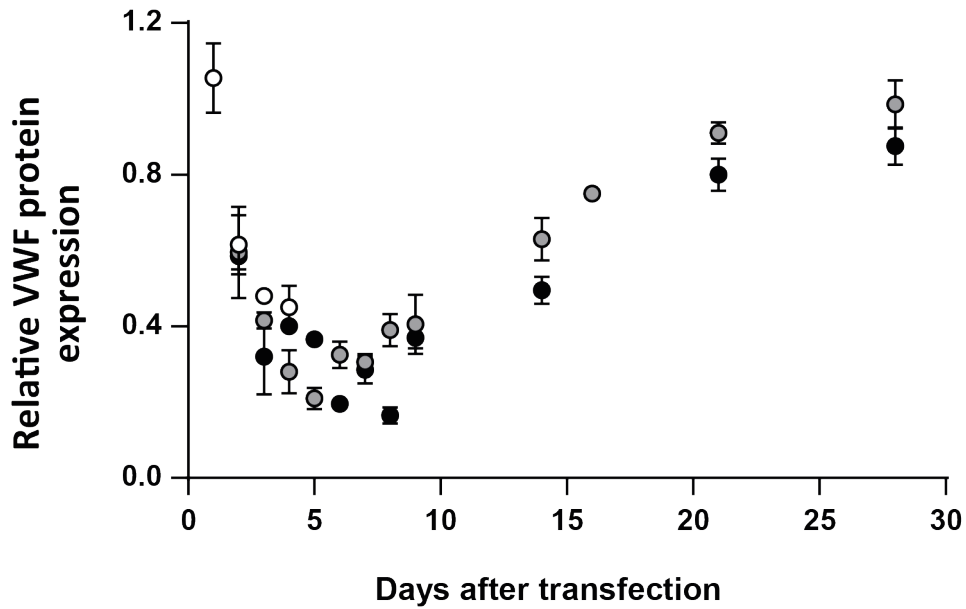


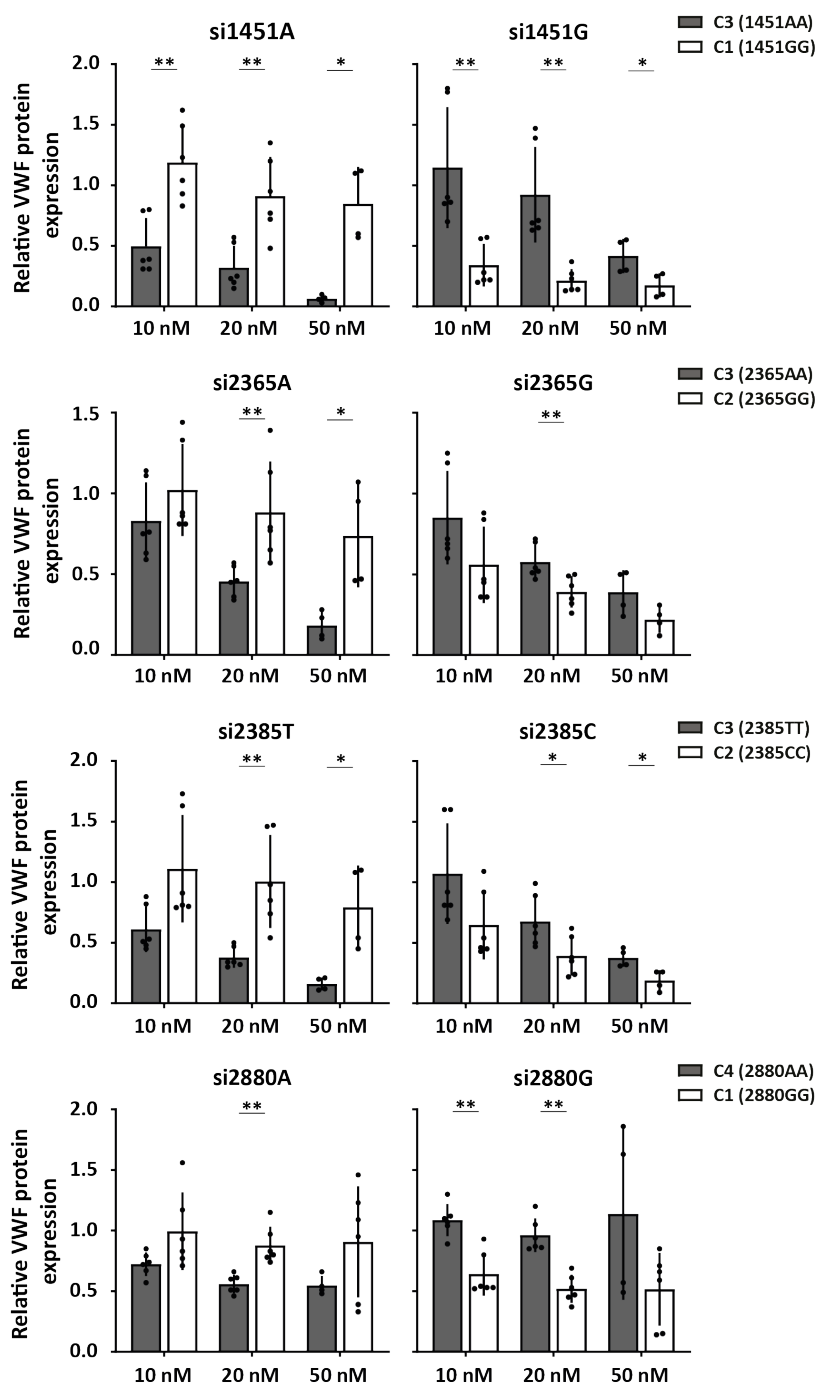
## Supplementary material

Figure S1



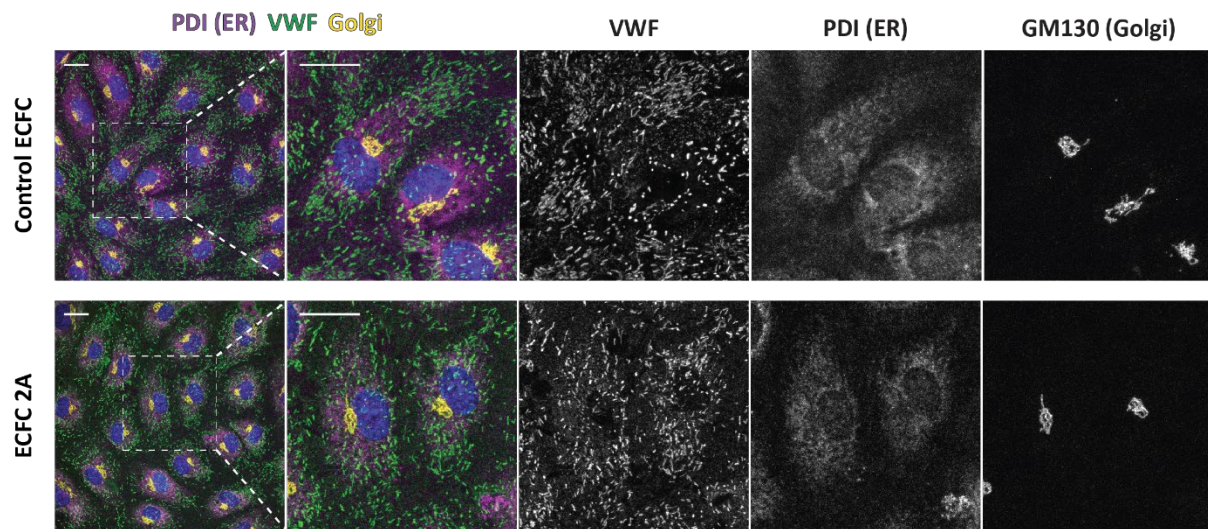
**Fig. S1** Time course of VWF inhibition by siRNAs in ECFCs. ECFC C3 was plated in a concentration of 100,000 cells per well and cells were transfected with 2  $\mu$ l DharmaFECT and 10 nM siVWF (inhibits total VWF) or siNEG. 24 hour medium was taken at the time points indicated in the Figure. Shown are the VWF:Ag levels measured in cells transfected with siVWF, normalized to the VWF:Ag levels measured in cells transfected with siNEG. The experiment under these conditions was performed three times in duplicate. In one experiment medium was harvested 1, 2, 3 and 4 days after transfection. In two other experiments medium was harvested from 2 days after transfection until 28 days after transfection. Separate experiments are shown by different colored circles. Lowest relative VWF protein expression was observed six days after transfection. ECFC, endothelial colony forming cell; nM, nanomolar; siNEG, negative control siRNA; siVWF, siRNA against VWF; VWF, von Willebrand factor; VWF:Ag, VWF antigen

**Figure S2**



**Fig. S2** Relative VWF protein expression of ECFCs transfected with allele-specific siRNAs at concentrations of 10, 20 and 50 nM. si1451A and si1451G were tested for their efficiency and specificity in ECFC C1 and ECFC C3. si2365A, si2365G, si2385C and si2385T were tested for their efficiency and specificity in ECFC C2 and ECFC C3. si2880A and si2880G were tested for their efficiency and specificity in ECFC C1 and ECFC C4. Shown are the total VWF:Ag levels (conditioned medium + protein lysates) measured in ECFCs transfected with specific siRNAs, normalized to the total VWF:Ag levels measured in the same ECFCs transfected with siNEG. Shown are the mean  $\pm$  1 SD of three independent experiments performed in duplicate for 10 and 20 nM, and of two independent experiments performed in duplicate for 50 nM. Mann-Whitney, \* $p$  < 0.05 \*\* $p$  < 0.01. nM, nanomolar; si1451G, indicates 'small interfering RNA against VWF c.1451G', all siRNAs are indicated according to this principle; VWF, von Willebrand factor

**Figure S3**



**Fig. S3** Confocal images of a healthy control ECFC and ECFC 2A. ECFCs were stained for VWF, PDI (ER), GM130 (Golgi) and nuclei. The first column shows an overview image with VWF (green), PDI (magenta), GM130 (yellow) and nuclei (blue). The second column shows a zoom-in of the first column. The third, fourth and fifth columns show greyscale images of VWF, PDI and Golgi staining, respectively. Based on these confocal images there is colocalization of VWF and ER in ECFC 2A, but not of VWF and Golgi. Scale bar represents 20  $\mu$ m. Images were taken with the Leica TCS SP8 X WLL converted confocal microscope equipped with a 63x/1.40 NA Plan Apo oil immersion objective. ECFC, endothelial colony forming cell; GM130, Golgi matrix protein of 130 kDa; PDI, protein disulphide isomerase; si1451G, indicates 'small interfering RNA against VWF c.1451G', all siRNAs are indicated according to this principle; VWF, von Willebrand factor

**Table S1.** qPCR primer list. Allele-specific qPCR primers designed to amplify single *VWF* alleles, and qPCR primers that amplify *VWF* and *GAPDH*

Name	Sequence	T <sub>m</sub> (°C)
1451A Fw	TGACCTCCGCATCCAGCAT	
1451G Fw	TGACCTCCGCATCCAGCGT	65.7
1451 Rv	TGTAATCCCACACAGGCCG	
2365A/2385T Fw	GCTGAAGGGCTCGAGTGTAT	
2365G/2385C Fw	CTGAAGGGCTCGAGTGTGT	62.5
2365/2385 Rv	GGGCCACACATCTGTTCTCA	
2880A Fw	GTGGTGGAGTCTGGCCGAT	
2880G Fw	GGTGGAGTCTGGCCGCT	65.7
2880G Rv	CAGGCCACACACTTTCTCCT	
<i>VWF</i> Fw	TTGACGGGGAGGTGAATGTG	60
<i>VWF</i> Rv	ATGTCTGCTTCAGGACCACG	
<i>GAPDH</i> Fw	ACCATCTTCCAGGAGCGAGA	60
<i>GAPDH</i> Rv	GACTCCACGACGTACTIONCAGC	

The red nucleotides indicate the SNP variants. ASP-qPCR, allele-specific quantitative PCR; Fw, forward; Rv, reverse; *GAPDH*, Glyceraldehyde 3-phosphate dehydrogenase; *VWF*, von Willebrand factor