

## Supplementary Information

### **Motor phenotype is not associated with vascular dysfunction in symptomatic Huntington's disease transgenic R6/2 (160 CAG) mice.**

Di Pardo A<sup>1</sup>, Carrizzo A<sup>1</sup>, Damato A<sup>1</sup>, Castaldo S<sup>1</sup>, Amico E<sup>1</sup>, Capocci L<sup>1</sup>, Ambrosio M<sup>1</sup>, Pompeo F<sup>1</sup>, De Sanctis C<sup>1</sup>, Puca AA<sup>2,3</sup>, Remondelli P<sup>3</sup>, Maglione V<sup>1\*</sup> and Vecchione C<sup>1,3\*</sup>.

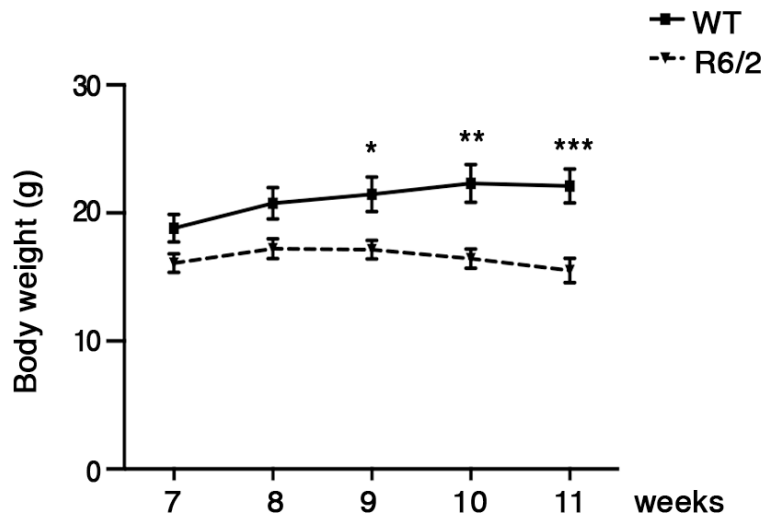
<sup>1</sup> IRCCS Neuromed, Pozzilli (Italy) <sup>2</sup> IRCCS Multimedica, Milano (Italy) <sup>3</sup> University of Salerno, Salerno (Italy)

\*Correspondence to:

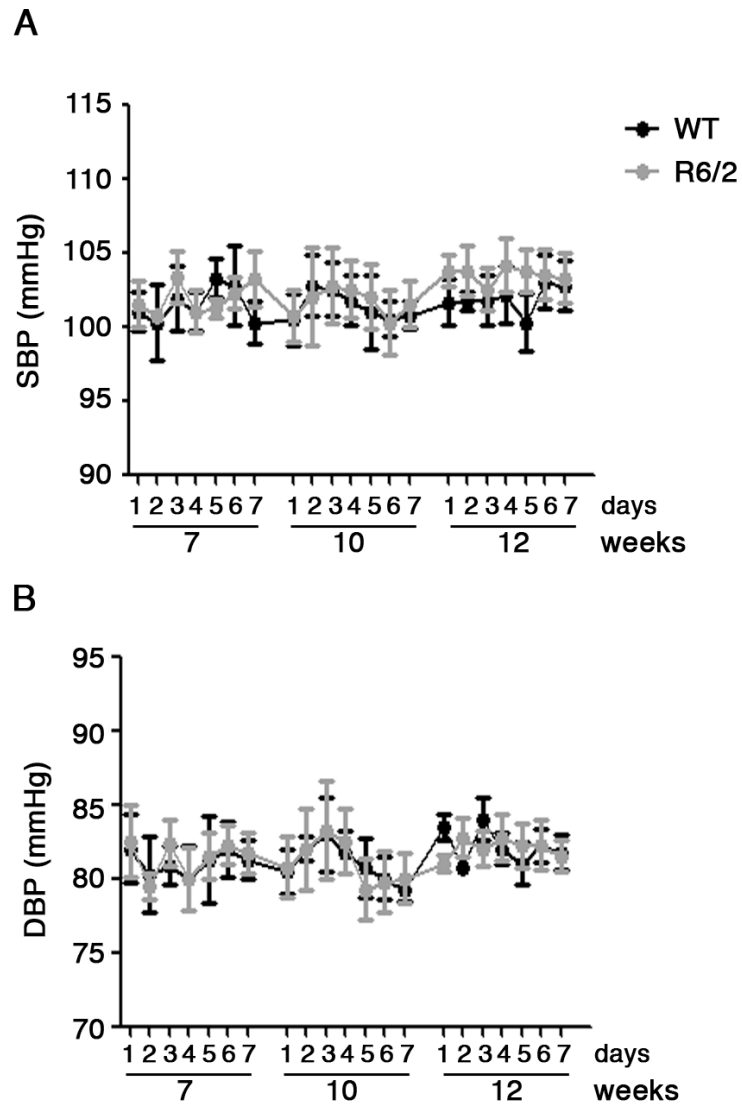
Carmine Vecchione, IRCCS Neuromed,  
Vascular Physiopathology Unit,  
Loc. Camerelle, 86077, Pozzilli (IS), Italy.  
University of Salerno,  
Department of Medicine and Surgery,  
via Allende, 84084, Baronissi (SA), Italy.  
E-mail [cvecchione@unisa.it](mailto:cvecchione@unisa.it)

and

Vittorio Maglione, IRCCS Neuromed,  
Centre for Neurogenetics and Rare Disease,  
Loc. Camerelle, 86077, Pozzilli (IS), Italy.  
E-mail: [vittorio.maglione@neuromed.it](mailto:vittorio.maglione@neuromed.it)



**Supplementary Figure 1. Body weight.** Body weight measurement in symptomatic R6/2 mice and WT littermates. Each data point represents the average performance  $\pm$  S.E.M. of 6 mice for each group. \*,  $P < 0.05$ ; \*\*,  $P < 0.001$ ; \*\*\*,  $P < 0.0001$ . Two-way ANOVA with Bonferroni post-test. Interaction,  $F(4, 40) = 34.27$ ;  $p < 0.0001$ . Complete tabular statistics for ANOVA is reported in the Supplementary Table 2.



**Supplementary Figure 2. Measurement of blood pressure in HD mice.** Systolic (SBP) (A) and Diastolic blood pressure (DBP) in 7, 10 and 12 weeks old R6/2 mice and age-matched WT littermates. N=6 for each groups. Two-way ANOVA, Bonferroni post-test. SBP; F= 0,6037. DBP; F= 0,5026

**Supplementary Table 1.** Tabular results for Two Way ANOVA reported in Figure 1

2way ANOVA Tabular results					
Table Analyzed	Rotarod				
Two-way RM ANOVA	Matching: Stacked				
Alpha	0.05				
Source of Variation	% of total variation	P value	P value summary	Significant?	
Interaction	4.407	< 0.0001	****	Yes	
weeks	1.511	0.0290	*	Yes	
genotype	68.00	0.0002	***	Yes	
Subjects (matching)	21.07	< 0.0001	****	Yes	
ANOVA table	SS	DF	MS	F (DFn, DFd)	P value
Interaction	182.7	4	45.69	F (4, 40) = 8.796	P < 0.0001
weeks	62.64	4	15.66	F (4, 40) = 3.015	P = 0.0290
genotype	2820	1	2820	F (1, 10) = 32.28	P = 0.0002
Subjects (matching)	873.7	10	87.37	F (10, 40) = 16.82	P < 0.0001
Residual	207.8	40	5.194		
Number of missing values	0				

2way ANOVA Tabular results					
Table Analyzed	Horizontal				
Two-way RM ANOVA	Matching: Stacked				
Alpha	0.05				
Source of Variation	% of total variation	P value	P value summary	Significant?	
Interaction	8.710	< 0.0001	****	Yes	
weeks	6.049	0.0010	***	Yes	
genotype	69.17	< 0.0001	****	Yes	
Subjects (matching)	5.466	0.0519	ns	No	
ANOVA table	SS	DF	MS	F (DFn, DFd)	P value
Interaction	428.8	4	107.2	F (4, 40) = 8.210	P < 0.0001
weeks	297.8	4	74.44	F (4, 40) = 5.701	P = 0.0010
genotype	3405	1	3405	F (1, 10) = 126.6	P < 0.0001
Subjects (matching)	269.1	10	26.91	F (10, 40) = 2.061	P = 0.0519
Residual	522.3	40	13.06		
Number of missing values	0				

**Supplementary Table 2.** Tabular results for Two Way ANOVA reported in Supplementary Figure 1

2way ANOVA Tabular results					
Table Analyzed	Body Weight				
Two-way RM ANOVA	Matching: Stacked				
Alpha	0.05				
Source of Variation	% of total variation	P value	P value summary	Significant?	
Interaction	4.215	< 0.0001	****	Yes	
weeks	3.983	< 0.0001	****	Yes	
genotype	43.61	0.0123	*	Yes	
Subjects (matching)	46.97	< 0.0001	****	Yes	
ANOVA table	SS	DF	MS	F (DFn, DFd)	P value
Interaction	30.83	4	7.707	F (4, 40) = 34.27	P < 0.0001
weeks	29.14	4	7.284	F (4, 40) = 32.39	P < 0.0001
genotype	319.0	1	319.0	F (1, 10) = 9.285	P = 0.0123
Subjects (matching)	343.5	10	34.35	F (10, 40) = 152.7	P < 0.0001
Residual	8.997	40	0.2249		
Number of missing values	0				