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## **Data supplement**

<b>Table DS1</b> Morning waking cortisol × gender, day of sampling, 5-HTTLPR (the serotonin transporter gene promoter) and BDNF (brain-derived neurotrophic factor gene) <sup>a</sup>					
	Coefficient	s.e.	Z	Р	95% CI
Female	0.24	-0.05	4.72	< 0.001	0.14 to 0.34
Day of sampling	-0.03	0.01	-2.5	0.013	-0.05 to $-0.01$
5-HTTLPR	0.11	0.03	3.2	0.001	0.04 to 0.18
BDNF	0.01	0.04	0.17	0.862	-0.76 to 0.1
Constant	0.43	0.11	3.74	0.000	0.21 to 0.65
Variance components Between participants Within participants Intraclass correlation	0.43 0.52 0.40	0.02 0.01 0.03			0.39 to 0.47 0.50 to 0.54 0.35 to 0.46

a. This multilevel model was obtained from 1545 observations of cortisol assayed from 392 individuals with an average of 3.9 (range 2–4) samples per participant. The log likelihood was — 1345.5459 and Akaike's information criterion (AIC) was 2885.092; which gave the best fit. Inclusion of any two-way interactions were non-significant and did not improve the fit (e.g. gender × 5-HTTLPR and gender × BDNF, AIC = 2887.669). The intraclass coefficient shows that 60% of the variance for cortisol is within individuals and 40% between individuals.

Tables DS2–4 indicate the adjustment for confounders at entry in predicting depression onset. Effects: adjusted to morning cortisol = 1.04 ng/ml, BDNF = Val66Val, 5-HTTLPR = I/l. The

tables shows no effects of age, gender or minor depression at entry on the overall model or two two-way interactions between *BDNF*, 5-HTTLPR and morning salivary cortisol.

	No major depressive disorder ( $n = 317$ ) v. major depressive disorder ( $n = 40$ )			
Factor	Coefficient	s.e.	Wald χ <sup>2</sup>	Р
Intercept	- 12.9924	3.146	-4.15	< 0.0001
Age at entry	0.1578	0.1666	0.95	0.34
Depressive symptoms	2.1427	0.4990	4.29	< 0.0001
Morning salivary cortisol	1.4792	0.8652	1.71	0.09
BDNF	2.8254	1.2340	2.29	0.02
5-HTTLPR	-3.1515	1.3096	-2.41	0.02
Life events	1.2629	0.4705	2.68	0.007
BDNF × morning cortisol	-2.3499	0.9877	-2.40	0.002
5-HTTLPR × morning cortisol	2.1219	1.0336	2.05	0.04

	No major dep	No major depressive disorder ( $n = 317$ ) $v$ . major depressive disorder ( $n = 40$ )			
Factor	Coefficient	s.e.	Wald χ <sup>2</sup>	Р	
Intercept	-9.227	1.9206	-4.80	< 0.00001	
Minor depression	0.1578	0.1666	0.95	0.34	
Depressive symptoms	1.679	0.5045	3.33	< 0.001	
Morning salivary cortisol	1.154	0.8700	1.33	0.18	
Val66Val <i>BDNF</i>	2.401	1.2346	1.94	0.05	
Any 's' <i>5-HTTLPR</i>	-3.063	1.2995	-2.36	0.02	
Life events	1.295	0.4785	2.71	0.007	
BDNF × morning cortisol	<b>–</b> 1.946	0.9861	<b>-1.97</b>	0.05	
5-HTTLPR × morning cortisol	2.124	1.0322	2.06	0.04	

Table DS4 Sensitivity to gender; logistic regression model $(n = 357)$						
	No major depressive disorder ( $n = 317$ ) $v$ . major depressive disorder ( $n = 40$ )					
Factor	Coefficient	s.e.	Wald χ <sup>2</sup>	P		
Intercept	- 10.7837	1.9041	-5.66	< 0.0001		
Gender	0.1556	0.3924	0.40	0.69		
Depressive symptoms	2.0387	0.4845	4.21	< 0.0001		
Morning salivary cortisol	1.4769	0.8584	1.72	0.08		
Val66Val BDNF	2.7865	1.2336	2.26	0.02		
Any 's' 5-HTTLPR	-2.9803	1.2876	-2.31	0.02		
Life events	1.2658	0.4698	2.69	0.007		
BDNF × morning cortisol	-2.3074	0.9779	-2.36	0.02		
5-HTTLPR × morning cortisol	2.0152	1.0165	1.98	0.05		
BDNF, brain-derived neurotrophic factor gene; 5-HTTLPR, the serotonin transporter gene promoter.						