Supplementary material to the manuscript " Reduced levels of lacrimal glial cell line-derived neurotrophic factor (GDNF) in patients with focal epilepsy and focal epilepsy with comorbid depression: A biomarker candidate?" by Alexander A. Shpak, Flora K. Rider, Tatiana A. Druzhkova, Marina Y. Zhanina, Sofya B. Popova, Alla B. Guekht, Natalia V. Gulyaeva

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| **Изображение выглядит как текст, снимок экрана, Шрифт, число  Автоматически созданное описание**  **(a)** | **Изображение выглядит как текст, снимок экрана, Шрифт, число  Автоматически созданное описание**  **(b)** |
| **Изображение выглядит как текст, снимок экрана, Шрифт, число  Автоматически созданное описание**  **(c)** | |  |  |  |  |  | | --- | --- | --- | --- | --- | | parameter | estimate | Std error | statistic | p-value | | GDNF in LF | 0.987 | 0.004 | -3.29 | 0.001 | | BDNF in BS | 0.762 | 0.12 | -2.31 | 0.02 |   **(d)** |
| **Изображение выглядит как текст, снимок экрана, График, линия  Автоматически созданное описание** | **Изображение выглядит как текст, снимок экрана, График, диаграмма  Автоматически созданное описание** |
| **(e)** | **(f)** |
| *Изображение выглядит как диаграмма, текст, График, линия  Автоматически созданное описание*  **(g)** | |
| **Figure 1S.** Predictors of focal epilepsy development. Model involving all predictors (a); model involving only significant predictors (b); Pseudo R squared for model with only significant predictors (c); Odds ratio of predictors for model with only significant predictors (d); Dependence of changes in GDNF in LF (e) and BDNF (f) levels on the likelihood of developing epilepsy. Vertical lines along the x-axis indicate observations; A grey bar along the blue line indicates a 95% confidence interval; Determination of the accuracy of the selected model with a cut-off point of 0.5 for the binary classification (85%). Determination the optimal value of the cut-off point, depending on the accuracy for the model that predicts focal epilepsy development (0.68) (g). | |

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| **(a)** | **(b)** |
|  | |  |  |  |  |  | | --- | --- | --- | --- | --- | | parameter | estimate | Std error | statistic | p-value | | GDNF in LF | 0.983 | 0.0064 | -2.64 | 0.0083 | | cortisol in BS | 1.01 | 0.0060 | 2.44 | 0.015 | | TNF-α in BS | 1.8 | 0.23 | 2.50 | 0.013 | |
| **(c)** | **(d)** |
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| **(e)** | **(f)** |
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| **(g)** | **(h)** |
| **Figure 2S.** Predictors of depression development. Model involving all predictors (a); model involving only significant predictors (b); Pseudo R squared for model with only significant predictors (c); Odds ratio of predictors for model with only significant predictors (d); Dependence of changes in GDNF in LF (e), cortisol (f) and TNF-α (g) levels on the likelihood of developing depression. Vertical lines along the x-axis indicate observations; A grey bar along the blue line indicates a 95% confidence interval; Determination of the accuracy of the selected model with a cut-off point of 0.5 for the binary classification (93%). Determination the optimal value of the cut-off point, depending on the accuracy for the model that predicts depression development (0.35). (h). | |

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| **(a)** | **(b)** |
|  | |  |  |  |  |  | | --- | --- | --- | --- | --- | | parameter | estimate | Std error | statistic | p-value | | GDNF in LF | 0.99 | 0.0055 | -2.46 | 0.014 | | BDNF in BS | 0.59 | 0.181 | -2.96 | 0.0031 | | TNF-α in BS | 1.77 | 0.199 | 2.87 | 0.0041 | |
| **(c)** | **(d)** |
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| **(e)** | **(f)** |
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| **(g)** | **(h)** |
| **Figure 3S.** Predictors of development of comorbid depression and epilepsy. Model involving all predictors (a); model involving only significant predictors (b); Pseudo R squared for model with only significant predictors (c); Odds ratio of predictors for model with only significant predictors (d); Dependence of changes in GDNF in LF (e), TNF-α (f) and BDNF (g) levels on the likelihood of developing comorbid depression and epilepsy. Vertical lines along the x-axis indicate observations; A grey bar along the blue line indicates a 95% confidence interval; Determination of the accuracy of the selected model with a cut-off point of 0.5 for the binary classification (92%). Determination the optimal value of the cut-off point, depending on the accuracy for the model that predicts focal depression and epilepsy (0.75). (h). | |