

The SCREENIVF Hungarian version is a valid and reliable measure accurately predicting possible depression in female infertility patients

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Supplementary information

**Table S1**

*Title: Item and item-subscale statistics for the Hungarian version of the SCREENIVF*

| SCREENIVF subscales and item content               | M <sup>a</sup> | ± SD <sup>b</sup> | Corrected item-subscale correlation | Cronbach's alpha if item deleted |
|--|----------------|-------------------|-------------------------------------|----------------------------------|
| <b>Anxiety (A<sup>c</sup>)</b>                     |                |                   |                                     |                                  |
| A1 feeling fine                                    | 2.20           | .936              | .672                                | .875                             |
| A2 feeling satisfied                               | 2.47           | .963              | .699                                | .873                             |
| A3 worrying too much                               | 2.28           | .968              | .590                                | .880                             |
| A4 being happy                                     | 2.38           | .956              | .694                                | .873                             |
| A5 disturbing thoughts                             | 2.32           | .984              | .621                                | .878                             |
| A6 feeling safe                                    | 2.04           | .910              | .509                                | .885                             |
| A7 feeling pleased                                 | 2.59           | 1.012             | .653                                | .876                             |
| A8 haunting thoughts                               | 1.83           | .896              | .450                                | .889                             |
| A9 taking disappointments seriously                | 2.04           | 1.033             | .662                                | .875                             |
| A10 worried about current troubles                 | 2.40           | 1.053             | .690                                | .873                             |
| <b>Depression (D<sup>d</sup>)</b>                  |                |                   |                                     |                                  |
| D1 sadness   | .54            | .608              | .666                                | .766                             |
| D2 negative view of future                         | .72            | .727              | .585                                | .778                             |
| D3 failures  | .61            | .684              | .574                                | .780                             |
| D4 anhedonia                                       | .66            | .748              | .583                                | .779                             |
| D5 self-disappointment                             | .48            | .761              | .575                                | .781                             |
| D6 self-blame                                      | .44            | .677              | .509                                | .792                             |
| D7 suicidal ideation                               | .09            | .300              | .381                                | .814                             |
| <b>Social support (S<sup>e</sup>)</b>              |                |                   |                                     |                                  |
| S1 someone to help one when tense                  | 3.39           | .832              | .739                                | .886                             |
| S2 someone to talk to about nice experiences       | 3.79           | .538              | .656                                | .902                             |
| S3 someone to comfort one when in pain             | 3.47           | .781              | .825                                | .863                             |
| S4 someone to talk to when sad                     | 3.52           | .751              | .854                                | .857                             |
| S5 someone to help one with difficult job          | 3.55           | .724              | .736                                | .883                             |
| <b>Helplessness cognitions (HC<sup>f</sup>)</b>    |                |                   |                                     |                                  |
| HC1 missing out on important things                | 2.20           | 1.016             | .595                                | .857                             |
| HC2 fertility problem controlling life             | 2.14           | .948              | .682                                | .842                             |
| HC3 feeling useless                                | 2.00           | .014              | .624                                | .852                             |
| HC4 life incomplete                                | 2.65           | .019              | .711                                | .836                             |
| HC5 affect important aspects                       | 2.13           | .014              | .743                                | .831                             |
| HC6 feeling helpless                               | 2.64           | .057              | .634                                | .850                             |
| <b>Acceptance cognitions (AC<sup>g</sup>)</b>      |                |                   |                                     |                                  |
| AC1 ability to deal with consequences              | 2.22           | .835              | .685                                | .928                             |
| AC2 ability to live with fertility problem         | 2.07           | .923              | .795                                | .915                             |
| AC3 learning how to accept fertility problem       | 1.95           | .871              | .834                                | .910                             |
| AC4 ability to accept fertility problem            | 1.98           | .933              | .839                                | .909                             |
| AC5 cope with fertility problem even if not solved | 2.09           | .890              | .771                                | .918                             |
| AC6 ability to cope with fertility problem         | 2.16           | .847              | .827                                | .911                             |

*Note.* <sup>a</sup>Mean; <sup>b</sup>Standard deviation; <sup>c</sup>Anxiety subscale item; <sup>d</sup>Depression subscale item; <sup>e</sup>Social support subscale item; <sup>f</sup>Helplessness cognitions subscale item; <sup>g</sup>Acceptance cognitions subscale item.

**Table S2**

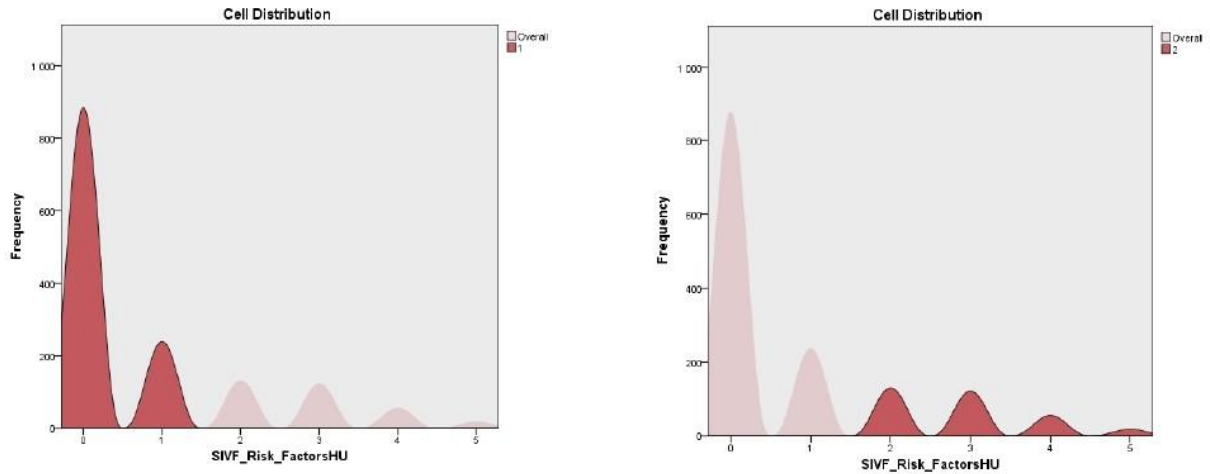
*Title: Sensitivity and specificity statistics for different cutoff points on the SCREENIVF Depression subscale and Risk Factors scale*

| SCREEN-IVF Depression subscale cutoff            | BDI <sup>b</sup> Category         | SCREENIVF Risk Factors Scale         |  | SCREENIVF 'At risk' c/o <sup>a</sup> 0/1 |               |                           | SCREENIVF 'At risk' c/o 1/2        |               |                           |
|--|-----------------------------------|--------------------------------------|--|--|---------------|---------------------------|------------------------------------|---------------|---------------------------|
|  |                                   | Predictive power (BLR <sup>c</sup> ) | AUC <sup>d</sup> in ROC <sup>e</sup> -analysis | Predictive power (BLR)                   | Youden -index | 'At risk' population rate | Predictive power (BLR)             | Youden -index | 'At risk' population rate |
| <b>3/4</b><br>(Beck et al., 1997)                | C/NC <sup>f</sup><br>(c/o 9/10)   | 84.5<br>B=1.862<br>Wald=<br>158.99   | .877<br>[CI <sup>g</sup> :<br>.849-<br>.905]   | 84.5<br>B=3.395<br>Wald=<br>242.70       | J=69.0        | 50.9%                     | 77.4<br>B=3.399<br>Wald=<br>139.57 | J=54.7        | 31.9%                     |
|  | NM/MS <sup>h</sup><br>(c/o 18/19) | 86.7<br>B=1.376<br>Wald=<br>144.80   | .905<br>[CI: .880-<br>.930]                    | 80.5<br>B=5.271<br>Wald=<br>27.342       | J=60.1        |                           | 81.4<br>B=3.100<br>Wald=<br>133.84 | J=64.8        |                           |
| <b>4/5</b><br>(Cluster analysis)                 | C/NC<br>(c/o 9/10)                | 82.3<br>B=1.787<br>Wald=<br>139.95   | .848<br>[CI: .817-<br>.879]                    | 82.3<br>B=3.155<br>Wald=<br>218.09       | J=64.6        | 42.0%                     | 76.0<br>B=3.557<br>Wald=118.<br>61 | J=51.9        | 29.3%                     |
|  | NM/MS<br>(c/o 18/19)              | 87.6<br>B=1.434<br>Wald=<br>151.28   | .918<br>[CI: .895-<br>.940]                    | 80.5<br>B=5.592<br>Wald=<br>30.75        | J=67.4        |                           | 83.1<br>B=3.116<br>Wald=<br>144.61 | J=65.1        |                           |
| <b>6/7</b><br>(M <sup>i</sup> +SD <sup>j</sup> ) | C/NC<br>(c/o 9/10)                | 77.8<br>B=1.636<br>Wald=<br>109.39   | .795<br>[CI: .760-<br>.831]                    | 77.8<br>B=2.757<br>Wald=<br>170.46       | J=55.6        | 39.2%                     | 69.8<br>B=3.143<br>Wald=<br>85.24  | J=39.4        | 22.8%                     |
|  | NM/MS<br>(c/o 18/19)              | 88.5<br>B=1.462<br>Wald=<br>155.54   | .898<br>[CI: .863-<br>.932]                    | 80.5<br>B=3.363<br>Wald=<br>103.28       | J=64.7        |                           | 87.4<br>B=3.380<br>Wald=<br>174.41 | J=66.4        |                           |

*Note.* All models were significant at the  $p < .01$  level. The best sensitivity was reached with the SCREENIVF Depression subscale cutoff of 3/4 and the Risk Factors scale cutoff of 0/1. The best specificity was reached with the SCREENIVF Depression subscale cutoff of 6/7 and the Risk Factors scale cutoff of 1/2. <sup>a</sup>cut-off; <sup>b</sup>Beck Depression Inventory; <sup>c</sup>binary logistic regression; <sup>d</sup>area under curve; <sup>e</sup>receiver operating characteristic; <sup>f</sup>Case vs No-case; <sup>g</sup>confidence interval; <sup>h</sup>No-to-mild vs Moderate-to-severe; <sup>i</sup>Mean; <sup>j</sup>Standard deviation.

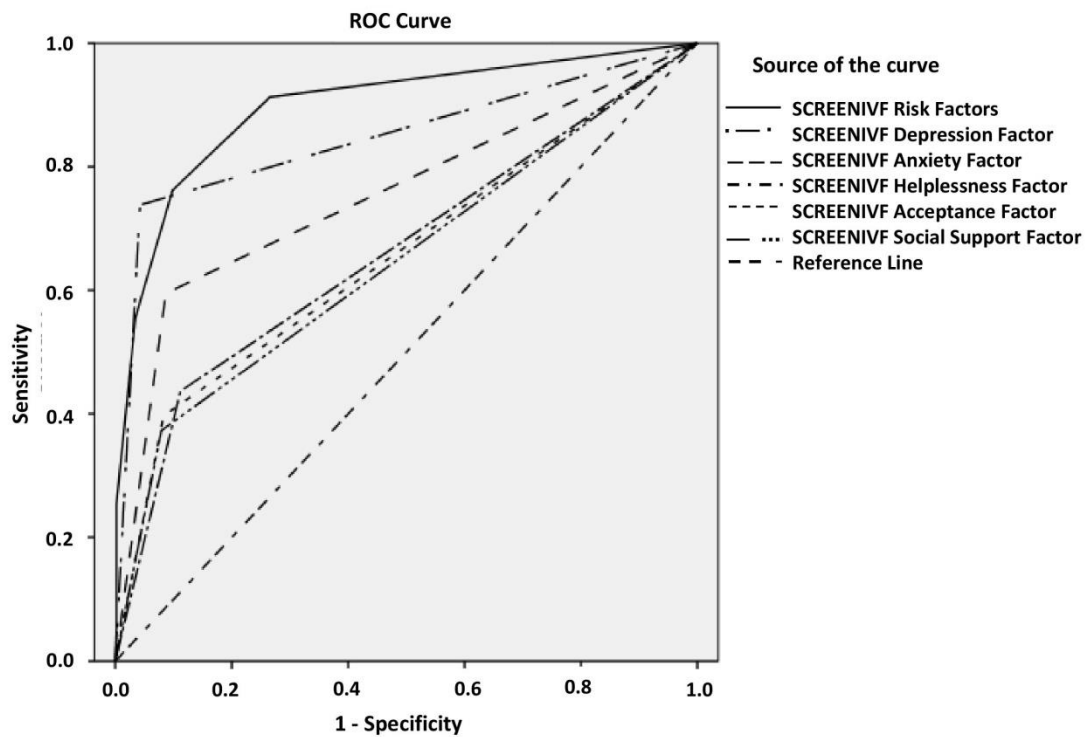
## Figure S1

*Title: Two-step cluster analysis of the SCREENIVF Risk Factors scale with a 6/7 (mean+ standard deviation) cutoff on the Depression subscale*



## Figure S2

*Title: ROC curves for total and individual SCREENIVF risk factors*



Diagonal segments are produced by ties.