**Cognitive performance and the course of depressive symptoms over seven years follow-up. The SMART-MR study**

***Appendix 1***

**Neuropsychological assessment**

Cognitive performance was assessed with a set of standard neuropsychological manual pen and paper tests, sensitive to mild impairments. Composite z-scores for the domains memory (MEM), working memory (WMEM), attention & executive functioning (EXEC), and information processing speed (SPEED) were calculated. This division was made according to standard neuropsychological practice and cognitive theory, as described in detail in Lezak (Lezak *et al* 2004). The composite scores for MEM included the immediate recall (range 0-15) and delayed recall (0-15) of the 15-word learning test (a modification of the Rey Auditory Verbal Learning test) (Brand and Jolles 1985), a retention score, estimated by dividing the number of words recalled after 25 minutes by the maximum number of words recalled during the immediate recall, and the delayed recall of the Rey-Osterrieth Complex Figure test (Osterrieth 1944). During the 15-word learning test a list of 15 unrelated words is presented to the participant 5 times in the same order. Participants have to remember as many words as possible. After a delay of 25 minutes, patients have to recall as many words as they remembered from the list. Thereafter a list of 30 words is presented to the participants and they have to recognize which words were and were not in the word list. The composite score for WMEM included the Forward and Backward Digit Span (of the Wechsler Adult Intelligence Scale-III) (Wechsler D.A. 2008). The digit span task asks participants to repeat a sequence of digits in forward order and in backward order. The length of the digit sequence is increased across the trials until the participant fails two consecutive trials of a particular length. The composite score for EXEC included three tests. First, we used the timing score of the Visual Elevator test, a timed test of 10 trials that measures mental flexibility and shifting of attention (Robertson *et al* 1996). In the visual elevator participants have to imagine that they are in an elevator and they have to count up and down while they follow a series of visually presented doors in an elevator. Second, we used the Brixton Spatial Anticipation test to assess the capacity to discover logical rules and mental inhibition and flexibility (Burgess PW and Shallice 1996). In the Brixton Spatial Anticipation test a book is presented to the participant with on each page the same array of 10 numbered circles. On each page, one of the circles is filled with black, the others not. The position of the filled circle changes from page to page according to a logical rule. Participants have to discover the rule by deciding where the filled circle is on the next page. Participants can discover the pattern based on what they have seen on the previous pages. The logical rules according which the filled circle changes will also change during the task. Participants have to anticipate on the changing rule and have to discover the new rule. Third, we used the Verbal Fluency test (letter A, 1-minute time frame, and category ‘animals’, 2-minute time frame) to assess mental flexibility and employment of strategies (Wilkins *et al* 1987). In the first test participants have to name in one minute as many words as possible starting with the letter A. In the second test the participants have two minutes to name as many animals as possible. SPEED was assessed with the Digit Symbol Substitution test (Lezak *et al* 2004). In the Digit Symbol Substitution test participants are presented with the numbers 1 to 9 randomly assigned in squares. Above these rows is a key with the numbers 1 to 9 that matches each number with an unrelated symbol. Following a practice trial participants have to fill in the correct symbol that matches the numbers in the squares. They have to minutes to get as far as possible to complete the task. The score of the test is the number of squares filled in correctly.