별첨1   비뚤림위험 평가

1. CBCR vs. 무치료(또는 추가 치료 효과): 27개 연구(31편 문헌)

연번(Ref ID)		1, 2, 3
1저자(출판연도)		Ophey(2021), Giehl(2020), Ophey(2020)
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	■ 낮음 □ 높음 □ 불확실	구체적 방법에 대한 언급없음 The online tool Research Randomizer (www. randomizer.org) was used to generate a blocked randomized allocation sequence with block size = 10 and a 1:1 ratio not stratified for any demographic or clinical variable. The blocked randomized allocation sequence (block size = 10, 1:1 ratio) was generated using the **online tool Research Randomizer (www.randomizer.org).**
Allocation concealment (배정순서 은폐)	■ 낮음 □ 높음 □ 불확실	구체적 방법에 대한 언급없음 The online tool Research Randomizer was used The blocked randomized allocation sequence (block size = 10, 1:1 ratio) was generated using **the online tool Research Randomizer (www.randomizer.org).**
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	□ 낮음 ■ 높음 □ 불확실	The original study was designed as a single-blind RCT Outcome assessors were blinded for group allocation, **patients were not.** **To ensure complete blinding for group allocation for the assessor and patient during PRE**, the randomization was performed only after initial testing by a researcher not further involved in this RCT. The study was designed as a single-blind RCT
Blinding of outcome assessment (결과평가에 대한 눈가림)	■ 낮음 □ 높음 □ 불확실	Outcome assessors were blinded for group allocation, patients were not. **Outcome assessors were blinded for group allocation,** patients were not.
Incomplete outcome data (불충분한 결과자료)	■ 낮음 □ 높음 □ 불확실	대조군 1명 탈락되었으나, 결과에 큰 영향을 미치지 않은 것으로 판단함 중재군 5명, 대조군 4명 탈락, 결과에 큰 영향을 미치지 않은 것으로 판단함 ITT 분석을 수행하여 중재군에서는 탈락자 없음, 대조군에서는 1명 발생함. 이는 결과에 영향이 없을 것으로 판단함
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	사전에 정해진 프로토콜은 없지만 사전에 계획된 것을 포함하여 예상되는 모든 결과를 보고하고 있다고 판단됨 German Clinical Trial Register (drks.de, DRKS00009379). 사전에 계획된 것을 포함하여 예상되는 모든 결과를 보고하고 있다고 판단됨 German Clinical Trials Register (DRKS00009379). 계획된 것을 포함하여 예상되는 모든 결과를 보고하고 있다고 판단됨
Private funding support (민간 연구비 지원)	■ 낮음 □ 높음 □ 불확실	The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: **This research was funded by department budget only** and did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

연번(Ref ID)	4	
1저자(출판연도)	Corti (2020)	
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	■ 낮음 □ 높음 □ 불확실	Randomization of patient assignment was based on a **coin flip procedure** using the randomization tool of **Microsoft Excel**: a random number was **randomly associated** to each recruited patient and determined the **assignment** to the Training-first Group (0.00 to 0.49) or the Waiting-first Group (0.50 to 1.00).
Allocation concealment (배정순서 은폐)	■ 낮음 □ 높음 □ 불확실	
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	□ 낮음 ■ 높음 □ 불확실	**The research team was not blinded** with respect to participants' treatment allocation, while **participants and outcome assessors were blinded.**
Blinding of outcome assessment (결과평가에 대한 눈가림)	■ 낮음 □ 높음 □ 불확실	
Incomplete outcome data (불충분한 결과자료)	■ 낮음 □ 높음 □ 불확실	중재군에서 2명, 대조군에서 1명의 탈락자가 발생함 그러나 결측치가 결과에 영향을 미치지 않을 것으로 판단됨
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	ISRCTN registry, with study ID ISRCTN59250807 사전에 정해진 프로토콜이 존재하고 사전에 계획된 것을 포함하여 예상되는 모든 결과를 보고하고 있다고 판단됨
Private funding support (민간 연구비 지원)	□ 낮음 ■ 높음 □ 불확실	**Lumosity** Cognitive Training was kindly provided by Lumos Labs, Inc, San Francisco (CA). Lumos Labs **did not play a role** in the design and conduct of the study, data interpretation or manuscript preparation. This study was **supported** by the **Italian Ministry of Health** (Ricerca Corrente 2015–2017 to A.B., Ricerca Corrente 2018–2019 to R.B. and Ricerca Finalizzata grant NET-2013-02356160 to R.B.).

연번(Ref ID)	5
1저자(출판연도)	Hwang (2020)

영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	■ 낮음 □ 높음 □ 불확실	Enrolled subjects who had completed the baseline assessment were **randomized in blocks** of 6 into 1 of 3 intervention groups (CCT, TC, or UC), using **computer generated random numbers** with an **allocation ratio of 1:1:1.**
Allocation concealment (배정순서 은폐)	■ 낮음 □ 높음 □ 불확실	
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	언급 없음
Blinding of outcome assessment (결과평가에 대한 눈가림)	■ 낮음 □ 높음 □ 불확실	All primary and secondary **outcomes** were evaluated by **assessors who were blinded** to the group assignment at the baseline and at 2 follow-up assessments of the 6-month intervention and 6-month follow-up.
Incomplete outcome data (불충분한 결과자료)	■ 낮음 □ 높음 □ 불확실	결측치가 두 군간 유의한 차이가 없고, – Furthermore, 71 (74.0%) participants completed the 2 follow-ups, and **no significant difference** in baseline characteristics (including baseline cognitive functions) other than visual acuity (P =0.048) was found between participants who completed the 2 follow-ups and those who did not. – Baseline (CCT = 32, TC = 32) – 6- mo follow-up (CCT = 23, TC = 24)
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	프로토콜은 없지만, 연구방법에 언급된 모든 결과를 보고하고 있음 – primary outcomes – Secondary outcomes
Private funding support (민간 연구비 지원)	■ 낮음 □ 높음 □ 불확실	**No** commercial organization with a direct or indirect interest in the content of this study conferred a benefit on the authors or on any organization with which the authors are associated. This study was **funded by the National Health Research Institutes** (NHRI-EX106-10317PI and NHRI-EX108-10804PI) and the **Ministry of Science and Technology** (MOST105-2627-M-038-001 and MOST106-2314-B-038-046-MY3), Taiwan.

연번(Ref ID)		6
1저자(출판연도)		김세연(2019)
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	□ 낮음 □ 높음 ■ 불확실	언급없음
Allocation concealment (배정순서 은폐)	□ 낮음 □ 높음 ■ 불확실	언급없음
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	언급없음
Blinding of outcome assessment (결과평가에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	언급없음
Incomplete outcome data (불충분한 결과자료)	■ 낮음 □ 높음 □ 불확실	결측치 없음
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	사전에 정해진 프로토콜은 없지만 사전에 계획된 것을 포함하여 예상되는 모든 결과를 보고하고 있다고 판단됨
Private funding support (민간 연구비 지원)	□ 낮음 □ 높음 ■ 불확실	언급없음

연번(Ref ID)	7	
1저자(출판연도)	Li (2019)	
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	□ 낮음 □ 높음 ■ 불확실	A total of 160 MCI patients were finally enrolled in Shanghai. They were **randomized** to the training or control group.
Allocation concealment (배정순서 은폐)	□ 낮음 □ 높음 ■ 불확실	
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	The study was a randomized controlled pilot trial.
Blinding of outcome assessment (결과평가에 대한 눈가림)	■ 낮음 □ 높음 □ 불확실	A validated neuropsychological battery for multiple cognitive domains was performed by **trained researchers** (Y. Qiao and YZ. Lu) **who were blind** to grouping.
Incomplete outcome data (불충분한 결과자료)	□ 낮음 ■ 높음 □ 불확실	**Dropout rate** was **higher in the control group** (2.5% in the training group and 21.25% in the control group). The main reason (10 patients in 17) for dropout in the control group was that they contacted with other physicians for medications.
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	프로토콜은 없지만, 연구방법에 언급된 모든 결과를 보고하고 있음 – It included the Chinese version of Addenbrooke's cognitive examination–revised (ACER), the auditory verbal learning test (AVLT)–Huashan version, the shape trail test (STT, including Part A and B), the Rey–Osterrieth complex figure test (CFT), symbol digit substitution test (SDS), and the Stroop Color–Word Test (SCWT).
Private funding support (민간 연구비 지원)	■ 낮음 □ 높음 □ 불확실	Funding: This work was supported by grants from **Clinical Research Center, Shanghai Jiao Tong University** School of Medicine [DLY201603]; the **National Natural Science Foundation** of China [81501086, 81400888, 91332107]; **National Key R&D Program** of China [2016YFC1305804]; and **Innovation Program of Shanghai Municipal Education** Commission [2017-01-07-00-01-E00046].

연번(Ref ID)	8
1저자(출판연도)	Svaerke (2019)

영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	□ 낮음 □ 높음 ■ 불확실	Randomization Procedure Therefore, 20 c envelopes were prepared by the person responsible for data collection with 10 notes labeled 1 (for the EI group) and 10 notes labeled 2 (for the LI group). All envelopes were sealed and mixed together by the person responsible for data collection, and all patients themselves drew 1 envelope freely from the pile at inclusion. Envelopes from patients who were excluded from the trial after inclusion were not put back.
Allocation concealment (배정순서 은폐)	■ 낮음 □ 높음 □ 불확실	
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	□ 낮음 ■ 높음 □ 불확실	CBCR was compared to no intervention in a controlled, randomized, nonblinded cross-over trial.
Blinding of outcome assessment (결과평가에 대한 눈가림)	□ 낮음 ■ 높음 □ 불확실	However, in this study the outcome assessor was not blind to the group allocation of patients, which constitutes a known possible methodological bias.
Incomplete outcome data (불충분한 결과자료)	■ 낮음 □ 높음 □ 불확실	결측치 없음
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	프로토콜은 없지만, 연구방법에 언급된 모든 결과를 보고하고 있음 - Primary Outcome - Secondary Outcomes
Private funding support (민간 연구비 지원)	■ 낮음 □ 높음 □ 불확실	This project has had no funding but is the result of professional interest of employees at the Department of Neurology at Bispebjerg Hospital. None of the authors have any conflicts of interest to disclose regarding this work.

연번(Ref ID)	9, 10	
1저자(출판연도)	Bernini (2019), Alloni (2018)	
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	■ 낮음 □ 높음 □ 불확실	The randomization list was generated using a simple randomization method with "random number generator" software.
Allocation concealment (배정순서 은폐)	■ 낮음 □ 높음 □ 불확실	
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	□ 낮음 ■ 높음 □ 불확실	This is a prospective, open-unblinded, randomized, controlled study.
Blinding of outcome assessment (결과평가에 대한 눈가림)	□ 낮음 ■ 높음 □ 불확실	
Incomplete outcome data (불충분한 결과자료)	□ 낮음 ■ 높음 □ 불확실	Within G1, 6 patients dropped-out because they were discharged from the hospital before the end of CT program, therefore statistical analysis considered 17 patients in G1 and 18 in G2 (see CONSORT diagram in Fig. 1).
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	프로토콜은 없지만, 연구방법에 언급된 모든 결과를 보고하고 있음 Statistical analysis
Private funding support (민간 연구비 지원)	■ 낮음 □ 높음 □ 불확실	Acknowledgments: This work was supported by grants of the Italian Ministry of Health to 2017. Conflict of interest: The authors declare that they have no conflict of interest. Conflict of interest: The authors do not have any conflict of interest to declare.

연번(Ref ID)	11	
1저자(출판연도)	De Luca (2018)	
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	☐ 낮음 ☐ 높음 ■ 불확실	We studied 35 subjects (**randomly** divided into 2 groups),
Allocation concealment (배정순서 은폐)	☐ 낮음 ☐ 높음 ■ 불확실	The patients were **randomly assigned** to 1 of 2 groups (experimental or standard treatment) in order of recruiting.
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	☐ 낮음 ■ 높음 ☐ 불확실	This clinical, **single-blind**, randomized trial
Blinding of outcome assessment (결과평가에 대한 눈가림)	☐ 낮음 ☐ 높음 ■ 불확실	언급 없음
Incomplete outcome data (불충분한 결과자료)	☐ 낮음 ☐ 높음 ■ 불확실	언급 없음
Selective reporting (선택적 보고)	☐ 낮음 ☐ 높음 ■ 불확실	프로토콜은 없지만, 연구방법에 언급된 모든 결과를 보고하고 있으나 일부결과는 그래프로만 제시되고 있음(figure 1) – Each patient was submitted to a complete neuropsychological evaluation before and after the rehabilitative treatment (T0 and T1, respectively). **Neuropsychological assessment** consisted of a screening test, that is, the MMSE, and specific test for different cognitive domains, including the Category Verbal Fluency (CVF), Letter Verbal Fluency, the Reversal Motor Learning (RML), the Attentive Matrices (AM), and the Rey Auditory Verbal Learning Test (RAVLI immediate and late RAVLR recall). The functional scales, which were filled with the help of the caregivers, included Basic Activities of Daily Living (ADL) and Instrumental Activities of Daily Living (IADL), Levels of Cognitive Functioning (LCF), and Barthel Index (BI). Depression and anxiety scales (i.e., Hamilton Rating Scale for Anxiety, HRS-A, and for Depression, HRS-D) were also administered.
Private funding support (민간 연구비 지원)	■ 낮음 ☐ 높음 ☐ 불확실	Conflict of interest: The authors state **neither conflicts of interest nor financial support.**

연번(Ref ID)	12	
1저자(출판연도)	Liu (2018)	
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	□ 낮음 □ 높음 ■ 불확실	a total of 128 cases were **randomly** chosen for computer-aided training experiment group (62 cases) and the traditional rehabilitation training control group (66 cases).
Allocation concealment (배정순서 은폐)	□ 낮음 □ 높음 ■ 불확실	언급 없음
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	언급 없음
Blinding of outcome assessment (결과평가에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	언급 없음
Incomplete outcome data (불충분한 결과자료)	■ 낮음 □ 높음 □ 불확실	결측치 없음
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	프로토콜은 없지만, 연구방법에 언급된 모든 결과를 보고하고 있음 – The MOCA is enabled for both groups before training, and repeat this process after 4 weeks
Private funding support (민간 연구비 지원)	■ 낮음 □ 높음 □ 불확실	The authors declare that the research was conducted in the **absence of any commercial or financial relationships** that could be construed as a potential **conflict of interest**.

연번(Ref ID)	13	
1저자(출판연도)	Zhou (2018)	
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	☐ 낮음 ☐ 높음 ■ 불확실	Forty inpatient and discharged aphasia patients were recruited and **randomly assigned** to the training group or control group.
Allocation concealment (배정순서 은폐)	☐ 낮음 ☐ 높음 ■ 불확실	
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	☐ 낮음 ☐ 높음 ■ 불확실	언급 없음
Blinding of outcome assessment (결과평가에 대한 눈가림)	☐ 낮음 ☐ 높음 ■ 불확실	언급 없음
Incomplete outcome data (불충분한 결과자료)	☐ 낮음 ☐ 높음 ■ 불확실	언급 없음
Selective reporting (선택적 보고)	■ 낮음 ☐ 높음 ☐ 불확실	프로토콜은 없지만, 연구방법에 언급된 모든 결과를 보고하고 있음 – Outcome Assessment
Private funding support (민간 연구비 지원)	■ 낮음 ☐ 높음 ☐ 불확실	FUNDING This work was supported by **grants** from the **Natural Science Foundation of China** (NSFC 31571156, 31871133) and grants from **Jiangsu Province** (BRA2017392, 2017–JY–025, H201670 and KYLX16_1302).

연번(Ref ID)	14	
1저자(출판연도)	Yang (2017)	
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	■ 낮음 □ 높음 □ 불확실	Random number tickets were assigned to the test group; patients with odd number were assigned to the experimental group, whereas those with even number were assigned to the control group
Allocation concealment (배정순서 은폐)	□ 낮음 □ 높음 ■ 불확실	은폐방법에 대한 언급없음
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	언급없음
Blinding of outcome assessment (결과평가에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	언급없음
Incomplete outcome data (불충분한 결과자료)	■ 낮음 □ 높음 □ 불확실	결측치 없음
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	사전에 정해진 프로토콜은 없지만 사전에 계획된 것을 포함하여 예상되는 모든 결과를 보고하고 있다고 판단됨
Private funding support (민간 연구비 지원)	□ 낮음 □ 높음 ■ 불확실	언급없음

연번(Ref ID)	15	
1저자(출판연도)	Jiang (2016)	
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	□ 낮음 □ 높음 ■ 불확실	This was a **randomized** controlled trial **with a 2X2 factorial design** that systematically evaluated the clinical effectiveness of a CR program (acupuncture combined with RehaCom cognitive training) for the treatment of cognitive dysfunction after stroke.
Allocation concealment (배정순서 은폐)	□ 낮음 □ 높음 ■ 불확실	these patients were **divided** into the CG, ATG, RTG, and ACRG.
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	언급 없음
Blinding of outcome assessment (결과평가에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	언급 없음
Incomplete outcome data (불충분한 결과자료)	■ 낮음 □ 높음 □ 불확실	During the entire 12-week intervention period, **36 patients withdrew** from the study for a variety of reasons. There were **no significant differences in the dropout rates** (P=0.853) or in the other demographic characteristics among the 4 groups (Table 2 and Figure 1). – Fig. 1. Consolidated Standards of Reporting Trials (CONSORT) diagram showing the flow of participants through the trial and reasons for dropout.
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	(프로토콜, ref 20) 연구방법에 언급된 모든 결과를 보고하고 있음
Private funding support (민간 연구비 지원)	■ 낮음 □ 높음 □ 불확실	This study was **sponsored by the International S&T Cooperation Program of China** (ISTCP Program; No. 2011DFG33240), the Ministry of Science and Technology of the People's Republic of China, the Science and technology platform construction project of Fujian science and Technology Department (Grant No. 2015Y2001), the Fujian Key Laboratory of Rehabilitation Technology and the Fujian Provincial Rehabilitation Industrial Institution. The authors declare **no conflicts of interest.**

연번(Ref ID)	16	
1저자(출판연도)	Cho (2015)	
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	□ 낮음 □ 높음 ■ 불확실	Twenty-five stroke patients were **randomly** al-located to either the CACR group (n=12) or the control group (n=13) **초록에 무작위 언급있으나 본문에 세부 내용이 언급없음**
Allocation concealment (배정순서 은폐)	□ 낮음 □ 높음 ■ 불확실	언급없음
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	언급없음
Blinding of outcome assessment (결과평가에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	언급없음
Incomplete outcome data (불충분한 결과자료)	■ 낮음 □ 높음 □ 불확실	결측치가 없음
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	프로토콜은 없지만, 사전에 계획된 것을 포함하여 예상되는 모든 결과를 보고하고 있다고 판단됨
Private funding support (민간 연구비 지원)	□ 낮음 □ 높음 ■ 불확실	민간업체의 연구 지원에 대한 언급없음

연번(Ref ID)		17	
1저자(출판연도)		Shin(신미정) (2015)	
영역	비뚤림위험	사유	
Random sequence generation (무작위 배정순서 생성)	□ 낮음 □ 높음 ■ 불확실	"실험군과 대조군은 **무작위로** 정해졌으며": 구체적 무작위 배정 순성 생성에 대한 언급 없음	
Allocation concealment (배정순서 은폐)	□ 낮음 □ 높음 ■ 불확실	언급없음	
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	눈가림에 대한 언급없음	
Blinding of outcome assessment (결과평가에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	언급없음	
Incomplete outcome data (불충분한 결과자료)	□ 낮음 □ 높음 ■ 불확실	연구 방법에 초기 모집한 대상자에 대한 언급이 없음	
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	사전에 정해진 프로토콜은 없지만 사전에 계획된 것을 포함하여 예상되는 모든 결과를 보고하고 있다고 판단됨	
Private funding support (민간 연구비 지원)	□ 낮음 □ 높음 ■ 불확실	민간 연구비 지원 언급없음	

연번(Ref ID)		18
1저자(출판연도)		Yoo (2015)
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	☐ 낮음 ☐ 높음 ■ 불확실	"The participants were randomly divided into a training group of 23 patients and a control group of 23 patients." 배정 순서생성에 관한 언급 없음
Allocation concealment (배정순서 은폐)	☐ 낮음 ☐ 높음 ■ 불확실	배정 순서 은폐에 관한 언급없음
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	☐ 낮음 ☐ 높음 ■ 불확실	연구 참여자 연구자의 눈가림에 대한 언급없음
Blinding of outcome assessment (결과평가에 대한 눈가림)	☐ 낮음 ☐ 높음 ■ 불확실	언급없음
Incomplete outcome data (불충분한 결과자료)	■ 낮음 ☐ 높음 ☐ 불확실	결측치 없음
Selective reporting (선택적 보고)	■ 낮음 ☐ 높음 ☐ 불확실	사전에 정해진 프로토콜은 없지만 사전에 계획된 것을 포함하여 예상되는 모든 결과를 보고하고 있다고 판단됨
Private funding support (민간 연구비 지원)	☐ 낮음 ☐ 높음 ■ 불확실	민간업체의 연구 지원에 대한 언급없음

연번(Ref ID)	19	
1저자(출판연도)	De Luca (2014)	
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	□ 낮음 □ 높음 ■ 불확실	"The patients were **randomly assigned** to one of two groups" 이외 구체적 언급없음
Allocation concealment (배정순서 은폐)	□ 낮음 □ 높음 ■ 불확실	
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	언급없음
Blinding of outcome assessment (결과평가에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	언급없음
Incomplete outcome data (불충분한 결과자료)	■ 낮음 □ 높음 □ 불확실	결측치 없음
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	사전에 정해진 프로토콜은 없지만 사전에 계획된 것을 포함하여 예상되는 모든 결과를 보고하고 있다고 판단됨
Private funding support (민간 연구비 지원)	■ 낮음 □ 높음 □ 불확실	The authors report **neither conflicts of interest nor financial supports.**

연번(Ref ID)		20	
1저자(출판연도)		Lin (2014)	
영역	비뚤림위험	사유	
Random sequence generation (무작위 배정순서 생성)	■ 낮음 □ 높음 □ 불확실	Patients were randomized between the treatment and control groups using a **random number table.**	
Allocation concealment (배정순서 은폐)	□ 낮음 □ 높음 ■ 불확실	언급 없음	
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	연구 참여자, 연구자에 대한 눈가림 언급없음	
Blinding of outcome assessment (결과평가에 대한 눈가림)	■ 낮음 □ 높음 □ 불확실	Neuropsychological assessments were **performed by two trained psychologists who were blinded** to group assignment.	
Incomplete outcome data (불충분한 결과자료)	■ 낮음 □ 높음 □ 불확실	결측치 없음	
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	사전에 정해진 프로토콜은 없지만 사전에 계획된 것을 포함하여 예상되는 모든 결과를 보고하고 있다고 판단됨	
Private funding support (민간 연구비 지원)	■ 낮음 □ 높음 □ 불확실	This study was sponsored by the Key **International S&T** Co-operation Program of Fujian Science and Technology Department (No. 2010I0007) and the 'Twelfth five-year' **National Technology Support** Project (No.2013BAI10B01). http://www.chinaconsulatesf.org/eng/kj/kjjh/	

연번(Ref ID)		21, 22
1저자(출판연도)		Akerlund (2013), Bjorkdahl (2013)
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	□ 낮음 □ 높음 ■ 불확실	The study was a **randomized,** controlled study. After a baseline assessment (A1) the patients were **randomized** by lot into either the intervention group (IG) or the control group (CG).
Allocation concealment (배정순서 은폐)	□ 낮음 □ 높음 ■ 불확실	
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	언급 없음
Blinding of outcome assessment (결과평가에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	언급 없음
Incomplete outcome data (불충분한 결과자료)	□ 낮음 □ 높음 ■ 불확실	일부 결과 그래프 제시(Bjorkdahl, 2013) 결측치가 두 군간 차이가 없음 – Table II. **The number of tested participants** (n) in the Intervention Group (IG) and the Control Group (CG) at the four neuropsychological assessments, A1–A4. The difference in numbers is due to **dropouts** during the study.
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	프로토콜은 없지만, 연구방법에 언급된 모든 결과를 보고하고 있음
Private funding support (민간 연구비 지원)	■ 낮음 □ 높음 □ 불확실	The authors report **no conflicts of interest**. The authors alone are responsible for the content and writing of the paper.

연번(Ref ID)		23
1저자(출판연도)		Prokopenko (2013)
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	■ 낮음 □ 높음 □ 불확실	"Randomization was performed with the use of method of letters"
Allocation concealment (배정순서 은폐)	□ 낮음 □ 높음 ■ 불확실	은폐에 대한 언급없음
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	언급없음
Blinding of outcome assessment (결과평가에 대한 눈가림)	■ 낮음 □ 높음 □ 불확실	assessments were repeated on day 14-16 by a trained assessor blind to randomization.
Incomplete outcome data (불충분한 결과자료)	■ 낮음 □ 높음 □ 불확실	결측치 없음
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	사전에 정해진 프로토콜은 없지만 사전에 계획된 것을 포함하여 예상되는 모든 결과를 보고하고 있다고 판단됨
Private funding support (민간 연구비 지원)	■ 낮음 □ 높음 □ 불확실	This work was supported by the President of Russian Federation Fund (Dr. Mozheyko E.Y. — Grant for Young Scientists MK-1629.2009.7) Dr. I.N. Shvetzova is supported by a Program "U.M.N.I.K. 2011-2012".

연번(Ref ID)		24
1저자(출판연도)		Cho(조영남) (2012)
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	☐ 낮음 ■ 높음 ☐ 불확실	연구 대상으로 선정된 대상자들은 **입원 순서**를 기준으로 하여 **무작위 배분**되었다. **홀수**번째 입원한 대상자들은 실험군으로 배분되었고 **짝수** 번째 입원한 대상자들은 대조군으로 **배분**되었다.
Allocation concealment (배정순서 은폐)	☐ 낮음 ■ 높음 ☐ 불확실	
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	☐ 낮음 ☐ 높음 ■ 불확실	언급 없음
Blinding of outcome assessment (결과평가에 대한 눈가림)	☐ 낮음 ☐ 높음 ■ 불확실	초기평가와 재평가는 일관성을 유지하기 위하여 **연구자에 의해 단독**으로 진행되었다.
Incomplete outcome data (불충분한 결과자료)	■ 낮음 ☐ 높음 ☐ 불확실	결측치 없음
Selective reporting (선택적 보고)	■ 낮음 ☐ 높음 ☐ 불확실	프로토콜은 없지만, 연구방법에 언급된 모든 결과를 보고하고 있음
Private funding support (민간 연구비 지원)	☐ 낮음 ☐ 높음 ■ 불확실	언급 없음

연번(Ref ID)	25	
1저자(출판연도)	Lee(이종민) (2012)	
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	☐ 낮음 ☐ 높음 ■ 불확실	대상자 선정 기준에 부합하는 대상자 20명을 선발하여 **무작위로 배분**하였다. 대상자들은 모두 병원에 입원하여 작업치료, 물리치료 등의 기본적인 입원치료를 받고 있었으며, 기본적인 입원치료와 전산화 인지재활 프로그램 RehaCom을 받는 실험군 10명과 기본적인 입원치료만 받는 대조군 10명으로 나누었다
Allocation concealment (배정순서 은폐)	☐ 낮음 ☐ 높음 ■ 불확실	
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	☐ 낮음 ☐ 높음 ■ 불확실	언급 없음
Blinding of outcome assessment (결과평가에 대한 눈가림)	☐ 낮음 ☐ 높음 ■ 불확실	초기평가와 재평가는 일관성을 위해 연구자가 단독으로 실시하였다
Incomplete outcome data (불충분한 결과자료)	■ 낮음 ☐ 높음 ☐ 불확실	결측치 없음
Selective reporting (선택적 보고)	■ 낮음 ☐ 높음 ☐ 불확실	프로토콜은 없지만, 연구방법에 언급된 모든 결과를 보고하고 있음 – 대인관계 변화척도(relationship change scale: RCS)
Private funding support (민간 연구비 지원)	☐ 낮음 ☐ 높음 ■ 불확실	언급 없음

연번(Ref ID)		26
1저자(출판연도)		Finn (2011)
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	■ 낮음 □ 높음 □ 불확실	Randomisation was achieved by having an independent person place slips of paper, with either 'treatment' or 'waitlist' written on them, into opaque envelopes that were then sealed
Allocation concealment (배정순서 은폐)	■ 낮음 □ 높음 □ 불확실	Randomisation was achieved by having an independent person place slips of paper, with either 'treatment' or 'waitlist' written on them, into opaque envelopes that were then sealed
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	언급없음
Blinding of outcome assessment (결과평가에 대한 눈가림)	■ 낮음 □ 높음 □ 불확실	All posttraining assessments were carried out by trained assessors who were blind to treatment group.
Incomplete outcome data (불충분한 결과자료)	■ 낮음 □ 높음 □ 불확실	중재군 4명, 대조군 5명으로 결측치가 결과에 미치는 영향이 적을 것으로 판단함
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	사전에 정해진 프로토콜은 없지만 사전에 계획된 것을 포함하여 예상되는 모든 결과를 보고하고 있다고 판단됨
Private funding support (민간 연구비 지원)	□ 낮음 □ 높음 ■ 불확실	언급없음

연번(Ref ID)	27	
1저자(출판연도)	Lundqvist (2010)	
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	■ 낮음 □ 높음 □ 불확실	The study is a **controlled study with a cross-over design**. the individuals were **randomized** into two groups at the beginning of the study, through **'drawing of lots'**.
Allocation concealment (배정순서 은폐)	□ 낮음 □ 높음 ■ 불확실	
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	언급 없음
Blinding of outcome assessment (결과평가에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	언급 없음 - A neuropsychologist assessed all subjects before training (baseline) and at 4 and 20 weeks after training.
Incomplete outcome data (불충분한 결과자료)	■ 낮음 □ 높음 □ 불확실	Despite the demanding program, there were **no drop outs** from the training and just **one drop out** from the 20 weeks follow-up.
Selective reporting (선택적 보고)	□ 낮음 ■ 높음 □ 불확실	cross-over 1st phase 중재군 결과 없음 (crossover 이후, 전체(21명) 대상, 중재후 결과만 있음, Table VI)
Private funding support (민간 연구비 지원)	■ 낮음 □ 높음 □ 불확실	Acknowledgements **The County Council of Őstergőtland, Sweden**, partially supported this study **financially.** The authors thank Őrjan Dahlstrőm, Department of Behavioral Sciences and Learning, Linkőping University for statistical support. Declaration of interest: The authors report **no conflicts of interest**. The authors alone are responsible for the content and writing of the paper.

연번(Ref ID)		28
1저자(출판연도)		Yoo(유찬욱) (2009)
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	□ 낮음 □ 높음 ■ 불확실	뇌졸중 노인 환자 40명(남자22명, 여자18명)을 두 집단(실험군, 대조군)으로 **무작위할당**하고,
Allocation concealment (배정순서 은폐)	□ 낮음 □ 높음 ■ 불확실	
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	언급 없음
Blinding of outcome assessment (결과평가에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	언급 없음
Incomplete outcome data (불충분한 결과자료)	□ 낮음 □ 높음 ■ 불확실	언급 없음
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	프로토콜은 없지만, 연구방법에 언급된 모든 결과를 보고하고 있음 – 모든 대상자들은 실험 전후로 인지평가인 LOTCA와 독립적인 　일상생활활동의 평가인 FIM을 측정하여 비교분석 하였다
Private funding support (민간 연구비 지원)	□ 낮음 □ 높음 ■ 불확실	언급 없음

연번(Ref ID)	29	
1저자(출판연도)	Lee(이상일) (2008)	
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	☐ 낮음 ☐ 높음 ■ 불확실	Patients were **randomly assigned** to either case or control group.
Allocation concealment (배정순서 은폐)	☐ 낮음 ☐ 높음 ■ 불확실	
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	☐ 낮음 ☐ 높음 ■ 불확실	언급 없음
Blinding of outcome assessment (결과평가에 대한 눈가림)	☐ 낮음 ☐ 높음 ■ 불확실	언급 없음
Incomplete outcome data (불충분한 결과자료)	☐ 낮음 ☐ 높음 ■ 불확실	언급 없음
Selective reporting (선택적 보고)	■ 낮음 ☐ 높음 ☐ 불확실	프로토콜은 없지만, 연구방법에 언급된 모든 결과를 보고하고 있음
Private funding support (민간 연구비 지원)	☐ 낮음 ☐ 높음 ■ 불확실	언급 없음

연번(Ref ID)		30
1저자(출판연도)		Westerberg (2007)
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	□ 낮음 □ 높음 ■ 불확실	언급 없음
Allocation concealment (배정순서 은폐)	■ 낮음 □ 높음 □ 불확실	During the initial neuropsychological assessment, the **psychologist and the participant** were **blind to which group** (training or control) the participant would be **randomized** to. **After the assessment**, a sealed, pre-addressed envelope (prepared by persons unrelated to the study), which **revealed the randomization** to either the treatment or control group, was opened and from this point **test administrators** were no longer blind to the study.
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	■ 낮음 □ 높음 □ 불확실	
Blinding of outcome assessment (결과평가에 대한 눈가림)	■ 낮음 □ 높음 □ 불확실	
Incomplete outcome data (불충분한 결과자료)	■ 낮음 □ 높음 □ 불확실	Three participants **withdrew; two** from the treatment group (one because of computer problems, one because of depression and changed medication) and **one** was originally in the control group and withdrew due to epilepsy debut.
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	프로토콜은 없지만, 연구방법에 언급된 모든 결과를 보고하고 있음 - Outcome measures
Private funding support (민간 연구비 지원)	□ 낮음 ■ 높음 □ 불확실	**Funding** The Swedish Stroke Foundation supported this study. **Conflict of interest** T. Klingberg and H. Westerberg are minor stock holders in **Cogmed** Cognitive Medical Systems AB, the company that **produced the software** used for training. For the other authors, no conflict is declared.

연번(Ref ID)		31
1저자(출판연도)		Jung(정재훈) (2006)
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	☐ 낮음 ☐ 높음 ■ 불확실	이에 동의한 연구 대상자를 **무작위로 배**분하여 전산화 인지재활을 받는 실험군 15명과 전산화 인지재활을 받지 않는 대조군 15명으로 나누었음
Allocation concealment (배정순서 은폐)	☐ 낮음 ☐ 높음 ■ 불확실	
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	☐ 낮음 ☐ 높음 ■ 불확실	언급 없음
Blinding of outcome assessment (결과평가에 대한 눈가림)	☐ 낮음 ☐ 높음 ■ 불확실	언급 없음
Incomplete outcome data (불충분한 결과자료)	■ 낮음 ☐ 높음 ☐ 불확실	결측치 없음
Selective reporting (선택적 보고)	■ 낮음 ☐ 높음 ☐ 불확실	프로토콜은 없지만, 연구방법에 언급된 모든 결과를 보고하고 있음
Private funding support (민간 연구비 지원)	☐ 낮음 ☐ 높음 ■ 불확실	언급 없음

1. CBCR vs. Active control : 19개 연구(22편 문헌)

연번(Ref ID)		32
1저자(출판연도)		Duff (2021)
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	■ 낮음 □ 높음 □ 불확실	Following the baseline visit, participants were **randomized to either** the experimental training program or the active control training program **(1:1 allocation) based on blocks of a randomly selected size**. The principal investigator (KD) applied the **randomization sequence**, which was generated **by the biostatistician** (JY), to sequentially numbered but otherwise identical **sealed packets** that contained an instruction manual for 1 of the training programs.
Allocation concealment (배정순서 은폐)	■ 낮음 □ 높음 □ 불확실	
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	■ 낮음 □ 높음 □ 불확실	This was a single site, randomized, placebo-controlled, **double-blind,** parallel trial (중략) **Participants remained blinded** until after their 1-year follow-up visit. **Research staff** who collected outcome measures were also **blinded** to treatment assignment. **Research staff** who provided technical assistance to participants were **not blinded.**
Blinding of outcome assessment (결과평가에 대한 눈가림)	■ 낮음 □ 높음 □ 불확실	
Incomplete outcome data (불충분한 결과자료)	■ 낮음 □ 높음 □ 불확실	**Ninety-four** participants returned for the **1-year follow-up** visit across both treatment groups. Demographically, these 94 participants did not differ from the full sample. – 중재군 1년 Lost to follow-up (n=12) → 43 – 대조군 1년 Lost to follow-up (n=7) → 51
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	프로토콜은 없지만, 연구방법에 언급된 모든 결과를 보고하고 있음 – following **outcome** measures: Auditory Memory/Attention Index of the RBANS (primary outcome), Total Scale score of the RBANS (secondary outcome), ADCS-ADL-MCI (secondary outcome), and a post intervention questionnaire that asked participants whether they thought that the training program helped their memory or overall thinking abilities and if they enjoyed the training program.
Private funding support (민간 연구비 지원)	■ 낮음 □ 높음 □ 불확실	**Funding:** MC is funded by an **National Health and Medical Research Council of Australia** Boosting Dementia Leadership Research Fellowship (NHMRC 1135761); KD is funded by an **NHMRC** Investigator **grant** 1193766; VS is funded by an NHMRC Practitioner Fellowship (606544). Declaration of competing interest: **None.**

연번(Ref ID)	33
1저자(출판연도)	Mahncke (2021)

영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	■ 낮음 □ 높음 □ 불확실	This was a multisite, prospective, parallel-arm, **randomized, active controlled, double-blinded trial** conducted at five military and Veteran Affairs (VA)-based trial sites.
Allocation concealment (배정순서 은폐)	■ 낮음 □ 높음 □ 불확실	Sites requested randomization allocation through e-mail, and a single coordinating centre staff member fulfilled requests through a **concealed randomization allocation sequence**.
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	■ 낮음 □ 높음 □ 불확실	To maintain the **participant blind**, consent forms described the study as comparing two distinct types of cognitive training. **Clinician/neuropsychological raters were blinded**.
Blinding of outcome assessment (결과평가에 대한 눈가림)	■ 낮음 □ 높음 □ 불확실	After **each assessment visit,** the assessor was recorded if the participant had made comments that broke the **assessor blind**.
Incomplete outcome data (불충분한 결과자료)	■ 낮음 □ 높음 □ 불확실	A complete CONSORT flow is shown in Fig. 2. **Drop/withdraw rates** were **not significantly different** between groups (P = 0.554), and there were no significant differences between completers and non-completers (data not shown) nor between the experimental treatment drop/withdraw and active control drop/withdraw groups (data not shown).
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	프로토콜은 없지만, 연구방법에 언급된 모든 결과를 보고하고 있음 - Cognitive measures - Functional and participant-reported outcome measures - Task-related measures
Private funding support (민간 연구비 지원)	□ 낮음 ■ 높음 □ 불확실	**Funding** The BRAVE study was **funded by a CDMRP grant** (PT100024) made to **Posit Science** as the coordinating centre, with subcontracts to each of the individual trial sites.

연번(Ref ID)	34	
1저자(출판연도)	Shyu (2021)	
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	□ 낮음 □ 높음 ■ 불확실	언급없음
Allocation concealment (배정순서 은폐)	□ 낮음 □ 높음 ■ 불확실	언급없음
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	□ 낮음 ■ 높음 □ 불확실	Single – blinded randomised controlled trial
Blinding of outcome assessment (결과평가에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	결과평가 눈가림 언급없음
Incomplete outcome data (불충분한 결과자료)	□ 낮음 ■ 높음 □ 불확실	중재군 대조군 각각 15명에서 실험 직후 각각9명, 10명, 1개월 추적관찰 후 각각 9명, 10명, 3개월 추적관찰 후 각각8명 8명으로 평가되어 탈락자가 절반 발생함
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	사전에 정해진 프로토콜은 없지만 사전에 계획된 것을 포함하여 예상되는 모든 결과를 보고하고 있다고 판단됨
Private funding support (민간 연구비 지원)	■ 낮음 □ 높음 □ 불확실	National Science Councils of Taiwan, ROC, Grant/Award Number: NSC101-2314- B-570-001; National Taipei University of Nursing and Health Sciences, Taipei, Taiwan, ROC, Grant/Award Number: 110ntunhs-TR-06

연번(Ref ID)		35, 36, 37
1저자(출판연도)		Broadhouse (2020), Suo (2016), Fiatarone Singh (2014)
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	■ 낮음 □ 높음 □ 불확실	A concealed, **computer-generated sequence of randomly permuted blocks** (block size ¼ 8) in a 1:1:1:1 ratio to each of the 4 intervention arms, stratified by sex and age (⟨75 and 75 Þ years), was generated by a research assistant not otherwise involved in the study via a **statistical website** (**www.randomization.com** created by Dr. Gerard E. Dallal, Tufts University) at the completion of all baseline assessments.
Allocation concealment (배정순서 은폐)	■ 낮음 □ 높음 □ 불확실	Assignments were then placed in **sealed opaque envelopes** and delivered to participants by the recruitment officer.
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	■ 낮음 □ 높음 □ 불확실	**Subjects** are informed that they will be randomly assigned to one of four treatment groups by the recruitment officer, and will **be blinded to** the investigators' hypothesis as to which is the preferred intervention arm. All groups will have an equal volume and frequency of contact with trainers over the 18 months of the study. All primary and secondary outcomes will be obtained and analyzed by **blinded assessors** on different days to the training programs.
Blinding of outcome assessment (결과평가에 대한 눈가림)	■ 낮음 □ 높음 □ 불확실	
Incomplete outcome data (불충분한 결과자료)	■ 낮음 □ 높음 □ 불확실	(Suo, 2016) There were **no significant** differences in **dropout (8%)**, between the four interventions groups.
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	프로토콜이 존재하며, 연구에서 사전에 정의해 놓은 결과들이 잘 보고되었음
Private funding support (민간 연구비 지원)	■ 낮음 □ 높음 □ 불확실	This study was funded by a National Health and Medical Research Council **(NH&MRC)** of Australia Dementia Research Grant, project grant ID No. 512672 from 2008-2011(https://www.nhmrc.gov.au). Additional funding for a research assistant position was sourced from the **NHMRC Program Grant** ID No. 568969, and the project was supported by the University of Sydney and University of New South Wales. The authors declare no conflicts of interest.

연번(Ref ID)		38	
1저자(출판연도)		Fellman(2020)	
영역	비뚤림위험	사유	

영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	□ 낮음 □ 높음 ■ 불확실	언급없음
Allocation concealment (배정순서 은폐)	□ 낮음 □ 높음 ■ 불확실	언급없음
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	□ 낮음 ■ 높음 □ 불확실	This study was a **single-blind,** fully home-based randomised controlled trial – 연구자에 대한 눈가림은 시행되지 않음
Blinding of outcome assessment (결과평가에 대한 눈가림)	□ 낮음 ■ 높음 □ 불확실	Self-assessment measures We implemented self-assessed pre-post questionnaires to assess possible subjectively experienced changes in WM functioning.
Incomplete outcome data (불충분한 결과자료)	■ 낮음 □ 높음 □ 불확실	결측치가 없음
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	사전에 정해진 프로토콜은 없지만 사전에 계획된 것을 포함하여 예상되는 모든 결과를 보고하고 있다고 판단됨
Private funding support (민간 연구비 지원)	■ 낮음 □ 높음 □ 불확실	Matti Laine received funding from the Academy of Finland (Grant No. 260276) and the Åbo Akademi University Endowment (grant to the BrainTrain project). Juha O. Rinne reports grants from the Academy of Finland (Grant No. 310962), grants from the Sigrid Juselius Foundation, and grants from Turku University Hospital (Grant No. 13463). – 대학기금의 후원을 받음

연번(Ref ID)	39	
1저자(출판연도)	Cavallo (2019)	
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	□ 낮음 □ 높음 ■ 불확실	언급없음
Allocation concealment (배정순서 은폐)	□ 낮음 □ 높음 ■ 불확실	언급없음
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	언급없음
Blinding of outcome assessment (결과평가에 대한 눈가림)	■ 낮음 □ 높음 □ 불확실	All participants underwent detailed europsychological assessments by experienced neuropsychologists blinded to patients' allocation before training
Incomplete outcome data (불충분한 결과자료)	■ 낮음 □ 높음 □ 불확실	중재군 대조군 각각 4명씩 탈락함. 이는 결과에 영향이 없을 것으로 판단함
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	사전에 정해진 프로토콜은 없지만 사전에 계획된 것을 포함하여 예상되는 모든 결과를 보고하고 있다고 판단됨
Private funding support (민간 연구비 지원)	■ 낮음 □ 높음 □ 불확실	The authors received no financial support for the research, authorship, and/or publication of this article.

연번(Ref ID)	40
1저자(출판연도)	Prokopenko (2019)

영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	□ 낮음 □ 높음 ■ 불확실	The study included 68 patients, who were **randomized to three groups**
Allocation concealment (배정순서 은폐)	□ 낮음 □ 높음 ■ 불확실	
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	언급 없음
Blinding of outcome assessment (결과평가에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	언급 없음
Incomplete outcome data (불충분한 결과자료)	□ 낮음 □ 높음 ■ 불확실	언급 없음
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	프로토콜은 없지만, 연구방법에 언급된 모든 결과를 보고하고 있음 - Assessments of neurological status were performed using the NIHSS scale. Cognitive status was investigated using the following scales: the Mini Mental State Examination (MMSE), the Frontal Assessment Battery (FAB), the Montreal Cognitive Assessment (MoCA), the Clock Drawing Test (CDT), and Schulte tables. Functional state was assessed using the Instrumental Activities of Daily Living (IADL) scale. The emotional domain was studied using the Hospital Anxiety and Depression Scale (HADS). Patients were assessed before and after treatment. The Physician's Clinical Global Impression scale (CGIS) and the Patient's Global Impression of Severity (PGIS) were used at the end of treatment courses.
Private funding support (민간 연구비 지원)	■ 낮음 □ 높음 □ 불확실	The authors have **no conflicts of interests**.

연번(Ref ID)	41	
1저자(출판연도)	Tang (2019)	
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	□ 낮음 □ 높음 ■ 불확실	The participants were **randomly assigned** to training or active control group. The personnel involved in conducting the study and data analysis were masked to the patient randomization.
Allocation concealment (배정순서 은폐)	□ 낮음 □ 높음 ■ 불확실	
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	■ 낮음 □ 높음 □ 불확실	Study **participants,** their caregiver, and **all assessors were blinded** to treatment assignment throughout the study.
Blinding of outcome assessment (결과평가에 대한 눈가림)	■ 낮음 □ 높음 □ 불확실	
Incomplete outcome data (불충분한 결과자료)	■ 낮음 □ 높음 □ 불확실	Of the 16 participants (26.7%) who **withdrew** from the study, five reported health issues, four reported time constraints, five were dissatisfied, and two reported personal issues. - 중재군 7, 대조군 9
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	프로토콜은 없지만, 연구방법에 언급된 모든 결과를 보고하고 있음 - Outcomes
Private funding support (민간 연구비 지원)	■ 낮음 □ 높음 □ 불확실	This study was funded by the **National Key R&D** Program of China (2017YFC1310102), **National Natural Science** Foundation of China (81671040, 31571156, 31871133, and 81701044), **Beijing Municipal Administration of Hospital's** Youth Program (QML20170801), and **Beijing Municipal Science & Technology** Commission (Z151100004015078).

연번(Ref ID)	42	
1저자(출판연도)	Prokopenko (2018)	
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	■ 낮음 □ 높음 □ 불확실	A simple randomization using **simple random tables** was performed.
Allocation concealment (배정순서 은폐)	□ 낮음 □ 높음 ■ 불확실	구체적인 방법 언급 없음 Twenty-five participants who received conventional treatment in the Neurorehabilitation Center were **randomized into three groups.**
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	언급 없음
Blinding of outcome assessment (결과평가에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	언급 없음
Incomplete outcome data (불충분한 결과자료)	■ 낮음 □ 높음 □ 불확실	결측치 없음
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	프로토콜은 없지만, 연구방법에 언급된 모든 결과를 보고하고 있음 - Diagnostic methods
Private funding support (민간 연구비 지원)	□ 낮음 □ 높음 ■ 불확실	언급 없음

연번(Ref ID)		43
1저자(출판연도)		Wiloth 2018)
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	□ 낮음 □ 높음 ■ 불확실	Participants were randomly assigned to the intervention (IG) or control group (CG) after baseline testing (T1) – 구체적인 방법은 언급없음
Allocation concealment (배정순서 은폐)	□ 낮음 □ 높음 ■ 불확실	언급없음
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	■ 낮음 □ 높음 □ 불확실	The present study was designed as a double-blinded, randomized, controlled
Blinding of outcome assessment (결과평가에 대한 눈가림)	■ 낮음 □ 높음 □ 불확실	The Physiomatassessment was administered by a person who was adequately trained in test procedures and who was blinded to the participants' group allocation.
Incomplete outcome data (불충분한 결과자료)	■ 낮음 □ 높음 □ 불확실	결측치 없음
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	사전에 정해진 프로토콜은 없지만 사전에 계획된 것을 포함하여 예상되는 모든 결과를 보고하고 있다고 판단됨
Private funding support (민간 연구비 지원)	□ 낮음 ■ 높음 □ 불확실	The study was supported by the Dietmar Hopp Stiftung, the Robert Bosch Stiftung, and the Network of Aging Research (NAR). Mrs. Lemke received the Robert Bosch grant.

연번(Ref ID)	44, 45	
1저자(출판연도)	van de Ven(a) (2017), van de Ven(b) (2017)	
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	■ 낮음 □ 높음 □ 불확실	Participants were **randomly assigned** evenly to one of three groups (intervention, mock training, waiting list) **by software that minimized the group differences** in age, education, sex, time since stroke, scores on a cognitive screening, and level of computer experience.
Allocation concealment (배정순서 은폐)	■ 낮음 □ 높음 □ 불확실	The minimization technique included elements of randomness into the minimization algorithm, to make the prediction to which group a certain participant would be **allocated uncertain**. The groups were coded **by the research coordinator.**
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	■ 낮음 □ 높음 □ 불확실	The study was a prospective multicenter, **double blind,** randomized controlled study (RCT).
Blinding of outcome assessment (결과평가에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	언급 없음
Incomplete outcome data (불충분한 결과자료)	■ 낮음 □ 높음 □ 불확실	- **Missing values** were replaced by the method of last observation carried forward (or backward in case the baseline score was missing). In this way, 13.1% of the intention-to-treat data were imputed. - see Fig 1 for participant flowchart including **drop-out reasons**
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	프로토콜은 없지만, 연구방법에 언급된 모든 결과를 보고하고 있음 - Primary outcomes - Secondary outcomes - Training performance
Private funding support (민간 연구비 지원)	■ 낮음 □ 높음 □ 불확실	**Funding:** This project is part of the research program "Treatment of cognitive disorders based on functional brain imaging" funded **by the Netherlands Initiative Brain and Cognition,** a part of the Organization for Scientific Research (NWO) under grant number 056-14-013 to JMJM. The funders had no role in study design, data collection and analysis, decision to publish, or preparation of the manuscript. Competing interests: The authors have declared that **no competing interests** exist.

연번(Ref ID)		46	
1저자(출판연도)		Cavallo (2016)	
영역	비뚤림위험	사유	
Random sequence generation (무작위 배정순서 생성)	■ 낮음 □ 높음 □ 불확실	Patients were then randomized in two separate groups (experimental and control groups) by means of a random number generator with mixed block sizes (the block size could be two, four or eight).	
Allocation concealment (배정순서 은폐)	■ 낮음 □ 높음 □ 불확실		
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	언급 없음	
Blinding of outcome assessment (결과평가에 대한 눈가림)	■ 낮음 □ 높음 □ 불확실	Neuropsychological Assessment Neuropsychologists were blind to the purposes of the study, and to the group each patient belonged to.	
Incomplete outcome data (불충분한 결과자료)	■ 낮음 □ 높음 □ 불확실	However, it is relevant to note that only two AD patients per group were missing at the 6-month assessment, as their families preferred to move them from our Health Assisted Residence to another one closer to their places. As a result, 38 out of 40 patients for both group were available at follow-up, allowing us to assess the vast majority of treated patients also 6 months from the end of the experimental and control interventions.	
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	프로토콜은 없지만, 연구방법에 언급된 모든 결과를 보고하고 있음 Neuropsychological Assessment Neuropsychiatric Assessment	
Private funding support (민간 연구비 지원)	■ 낮음 □ 높음 □ 불확실	Conflict of Interest: None declared.	

연번(Ref ID)		47
1저자(출판연도)		Wentink (2016)
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	■ 낮음 □ 높음 □ 불확실	A **blocked randomisation scheme** (blocks of six), with stratification for age and education level (extracted from the recruitment form and checked by examining the electronic patient registers), made up by a **random digit generator** (Microsoft Excel 2010), was used to **allocate** the patients either to the intervention group or control group.
Allocation concealment (배정순서 은폐)	■ 낮음 □ 높음 □ 불확실	
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	■ 낮음 □ 높음 □ 불확실	The **randomisation sequence** was **concealed (blinded)** from **research personnel**, so that **assessors** were not aware of whether a subject was randomised to the intervention or control group.
Blinding of outcome assessment (결과평가에 대한 눈가림)	■ 낮음 □ 높음 □ 불확실	
Incomplete outcome data (불충분한 결과자료)	■ 낮음 □ 높음 □ 불확실	결측값들로부터 예견되는 중재효과의 크기가 임상적으로 유의한 영향을 미치지 않을 것으로 판단됨
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	프로토콜은 없지만, 사전에 계획된 것을 포함하여 예상되는 모든 결과를 보고하고 있다고 판단됨
Private funding support (민간 연구비 지원)	□ 낮음 □ 높음 ■ 불확실	민간업체의 연구 지원에 대한 언급없음

연번(Ref ID)	48
1저자(출판연도)	Cerasa (2014)

영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	□ 낮음 □ 높음 ■ 불확실	Our study was a blind, randomized, controlled trial divided into four principal stages. 난수표 등 언급없음
Allocation concealment (배정순서 은폐)	■ 낮음 □ 높음 □ 불확실	The first stage was based on the recruitment of the patients for the study. The **patients were not informed about their group assignment** or the rationale behind their training performed in our clinic (Experimental group) or at home (Control group).
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	Our study was **a blind,** randomized, controlled trial
Blinding of outcome assessment (결과평가에 대한 눈가림)	■ 낮음 □ 높음 □ 불확실	Finally, at the end of the 6-week training, subjects from both groups were given **a blind evaluation,** using the same protocol employed at a baseline (T1).
Incomplete outcome data (불충분한 결과자료)	□ 낮음 □ 높음 ■ 불확실	언급 없음
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	프로토콜은 없지만, 연구방법에 언급된 모든 결과를 보고하고 있음 Neuropsychological assessment
Private funding support (민간 연구비 지원)	■ 낮음 □ 높음 □ 불확실	Acknowledgments This study was supported by MIUR (Ministero Universita' e Ricerca; PON 01_01180) Grants to Prof. Aldo Quattrone. **Conflict of interest** The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

연번(Ref ID)		49
1저자(출판연도)		Zimmermann (2014)
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	■ 낮음 □ 높음 □ 불확실	The study design was parallel controlled, randomized, and single-blinded. The patients were **randomly assigned** to 2 training conditions by means of covariate adaptive randomization. **Randomization** was restricted by group size (allocation ratio 1:1), age, sex, and educational level; it was performed by entering the patient's age, sex, and educational level into **a computer software program** after a baseline evaluation had been performed.
Allocation concealment (배정순서 은폐)	■ 낮음 □ 높음 □ 불확실	
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	□ 낮음 ■ 높음 □ 불확실	parallel controlled, randomized, and **single-blinded.**
Blinding of outcome assessment (결과평가에 대한 눈가림)	□ 낮음 ■ 높음 □ 불확실	The evaluating personnel, however, were **not blinded** to the training condition in the follow-up evaluation.
Incomplete outcome data (불충분한 결과자료)	■ 낮음 □ 높음 □ 불확실	In our study, we expected a very low dropout rate (<5%) because of good patient motivation and high flexibility in the appointments. Figure 1; lost 1명, 0명
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	프로토콜은 없지만, 연구방법에 언급된 모든 결과를 보고하고 있음 Neuropsychological assessment
Private funding support (민간 연구비 지원)	■ 낮음 □ 높음 □ 불확실	STUDY FUNDING: Supported by Parkinson Schweiz, the Gossweiler Foundation, and the Freie Akademische Gesellschaft Basel. These institutions had no further role in the study design or data evaluation and interpretation. (Jacques and Gloria Gossweiler Foundation is a non-profit organization)

연번(Ref ID)	50	
1저자(출판연도)	Zucchella (2014)	
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	■ 낮음 □ 높음 □ 불확실	Inclusion criteria were enrolled in the study and **randomly assigned** to the study group (SG) or to the control group (CG) **by means of a computer random number generator.**
Allocation concealment (배정순서 은폐)	□ 낮음 □ 높음 ■ 불확실	
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	언급없음
Blinding of outcome assessment (결과평가에 대한 눈가림)	■ 낮음 □ 높음 □ 불확실	All the assessments were done **by a psychologist blind** to the patients' randomization and not involved in their care.
Incomplete outcome data (불충분한 결과자료)	■ 낮음 □ 높음 □ 불확실	결측값들로부터 예견되는 중재효과의 크기가 임상적으로 유의한 영향을 미치지 않을 것으로 판단됨
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	사전에 정해진 프로토콜은 없지만 사전에 계획된 것을 포함하여 예상되는 모든 결과를 보고하고 있다고 판단됨
Private funding support (민간 연구비 지원)	□ 낮음 □ 높음 ■ 불확실	언급없음

연번(Ref ID)	51	
1저자(출판연도)	Rosen (2011)	
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	□ 낮음 □ 높음 ■ 불확실	Participants were randomly assigned to experimental or control groups. - 구체적 방법에 대한 언급없음
Allocation concealment (배정순서 은폐)	■ 낮음 □ 높음 □ 불확실	The randomization sequence was blinded from research personnel who enrolled participants or who administered cognitive tests.
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	■ 낮음 □ 높음 □ 불확실	Control for the time intensity of the intervention and to keep participants "blind" as to their group assignment. the neuroimaging researchers were blind to group assignment, **Random-assignment, double-blinded, active-placebo design**
Blinding of outcome assessment (결과평가에 대한 눈가림)	■ 낮음 □ 높음 □ 불확실	There were two parallel forms of this measure and because the person conducting the assessments was blind to the group status of participants,
Incomplete outcome data (불충분한 결과자료)	■ 낮음 □ 높음 □ 불확실	All participants in the experimental group made progress in the training program as measured by improved performance on training tasks from the beginning to the end of the program - Behavioral effects in the MRI에서 실험군 중 두명 탈락되었으나, 결과에 큰 영향을 미치지 않은 것으로 판단함
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	사전에 정해진 프로토콜은 없지만 사전에 계획된 것을 포함하여 예상되는 모든 결과를 보고하고 있다고 판단됨
Private funding support (민간 연구비 지원)	■ 낮음 □ 높음 □ 불확실	-This study received funding from Posit Science Corporation through research grants to Stanford University and the University of California, San Francisco. -Grant Support: NIA (K01AG025157, AG12995, AG09466, AG05865 01), NIMH (MH35182, MH59940), NCRR (RR09784) and Posit Science. - Ultimate responsibility for the design and conduct of the brain imaging portion of the trial and the analysis of the data resided with the principal investigators, Drs. A. Rosen and J. Gabrieli, who had complete and unrestricted access to the dataset.

연번(Ref ID)		52
1저자(출판연도)		Barnes(2009)
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	■ 낮음 □ 높음 □ 불확실	The randomization sequence was concealed from research personnel who enrolled subjects.
Allocation concealment (배정순서 은폐)	■ 낮음 □ 높음 □ 불확실	Subjects were randomly assigned to the intervention or control group in site-specific blocks that varied randomly in size to ensure adequate randomization.
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	□ 낮음 ■ 높음 □ 불확실	The control group performed three types of computer-based activities to control for the time intensity of the intervention and to keep subjects 'blind' as to their group assignment.
Blinding of outcome assessment (결과평가에 대한 눈가림)	■ 낮음 □ 높음 □ 불확실	Research personnel who administered cognitive tests were blinded to group assignment.
Incomplete outcome data (불충분한 결과자료)	■ 낮음 □ 높음 □ 불확실	Thirty-six of the 47 subjects (77%) successfully completed the cognitive training protocol while 5 intervention and 6 control subjects dropped out. Subjects who dropped out did not differ from those who completed the study in terms of age, sex, education, depressive symptoms or cognitive function scores.
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	사전에 정해진 프로토콜은 없지만 사전에 계획된 것을 포함하여 예상되는 모든 결과를 보고하고 있다고 판단됨
Private funding support (민간 연구비 지원)	□ 낮음 □ 높음 ■ 불확실	언급없음

연번(Ref ID)		53
1저자(출판연도)		Galante (2007)
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	□ 낮음 □ 높음 ■ 불확실	we carried out a single blind randomized controlled study~
Allocation concealment (배정순서 은폐)	□ 낮음 □ 높음 ■ 불확실	Twelve patients agreed to participate in the study and were **randomly assigned** to one of two groups (treatment or control condition) in order of recruiting.
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	□ 낮음 ■ 높음 □ 불확실	we carried out **a single blind** randomized controlled study~
Blinding of outcome assessment (결과평가에 대한 눈가림)	■ 낮음 □ 높음 □ 불확실	Each participant was evaluated **by a neuropsychologist, blinded to** the patient's group allocation, with the administration of a complete neuropsychological battery, behavioural and functional scales.
Incomplete outcome data (불충분한 결과자료)	□ 낮음 □ 높음 ■ 불확실	언급 없음
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	프로토콜은 없지만, 연구방법에 언급된 모든 결과를 보고하고 있음
Private funding support (민간 연구비 지원)	□ 낮음 □ 높음 ■ 불확실	언급없음

2. CBCR vs. 이학요법 : 25개 연구(27편 문헌)

연번(Ref ID)		54
1저자(출판연도)		Bernini (2021)
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	■ 낮음 □ 높음 □ 불확실	For the patient allocation, we generated random numbers from a uniform distribution in the range 0–1, dividing the range in three equal intervals and assigning each patient to the group corresponding to the sampled number.
Allocation concealment (배정순서 은폐)	■ 낮음 □ 높음 □ 불확실	For the patient allocation, we generated random numbers from a uniform distribution in the range 0–1, dividing the range in three equal intervals and assigning each patient to the group corresponding to the sampled number.
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	■ 낮음 □ 높음 □ 불확실	This study is a prospective double–blind 3–arm RCT. – 구체적 방법은 언급없음
Blinding of outcome assessment (결과평가에 대한 눈가림)	■ 낮음 □ 높음 □ 불확실	Cognitive outcomes were measured at T0 and T1 by a neuropsychologist who was blinded to the patient allocation.
Incomplete outcome data (불충분한 결과자료)	■ 낮음 □ 높음 □ 불확실	CCT그룹에서 3명, PCT그룹에서 2명으로 에서 실험군 중 두명탈락 되었으나, 결과에 큰 영향을 미치지 않은 것으로 판단함
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	Trial registration number (ClinicalTrials.gov): NCT04111640 (30th September 2019). 사전에 계획된 것을 포함하여 예상되는 모든 결과를 보고하고 있다고 판단됨
Private funding support (민간 연구비 지원)	■ 낮음 □ 높음 □ 불확실	This work was supported by a grant from the Italian Ministry of Health (Ricerca Corrente 2017–2019). – 정부연구비 지원

연번(Ref ID)	55	
1저자(출판연도)	Kim (2021)	
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	■ 낮음 □ 높음 □ 불확실	An independent researcher used **sequentially numbered** containers for randomization.
Allocation concealment (배정순서 은폐)	□ 낮음 □ 높음 ■ 불확실	순서 은폐에 대한 언급없음
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	연구 참여자 혹은 연구자에 대한 눈가림 언급은 없음
Blinding of outcome assessment (결과평가에 대한 눈가림)	■ 낮음 □ 높음 □ 불확실	Cognitive function was assessed in both groups at the time of enrollment (T0) and at the end of the 2 weeks of treatment sessions (T1) **by the same experienced psychologist who was blinded to group allocation.** Functional performance in ADL was assessed by occupational therapists **who were also blinded to group allocation.**
Incomplete outcome data (불충분한 결과자료)	■ 낮음 □ 높음 □ 불확실	중재군에서 3명의 탈락자가 발생함 그러나 결측치가 결과에 영향을 미치지 않을 것으로 판단됨
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	사전에 정해진 프로토콜은 없지만 사전에 계획된 것을 포함하여 예상되는 모든 결과를 보고하고 있다고 판단됨
Private funding support (민간 연구비 지원)	■ 낮음 □ 높음 □ 불확실	The authors certify that there is **no conflict of interest** with any **financial** organization regarding the material discussed in the manuscript.

연번(Ref ID)	56	
1저자(출판연도)	Baltaduoniene (2019)	
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	□ 낮음 □ 높음 ■ 불확실	Patients were **randomly assigned** to study groups with a **1: 1: 1 allocation ratio**, according to the rehabilitation registration journal.
Allocation concealment (배정순서 은폐)	□ 낮음 □ 높음 ■ 불확실	
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	□ 낮음 ■ 높음 □ 불확실	A randomised **single blinded** trial
Blinding of outcome assessment (결과평가에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	언급없음
Incomplete outcome data (불충분한 결과자료)	■ 낮음 □ 높음 □ 불확실	A total of 121 subjects established the trial, and **5 subjects** **left** the trial because of the following reasons: 2 subjects died, 2 subjects discontinued the trial due to the impairment of their health condition, and one subject refused to participate in the trial (Figure 1).
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	프로토콜은 없지만, 연구방법에 언급된 모든 결과를 보고하고 있음 - Before and after the trial, cognitive functions of the subjects were evaluated with the MMSE, Montreal Cognitive Assessment test that was validated and adapted in Lithuania (MoCA-LT).
Private funding support (민간 연구비 지원)	■ 낮음 □ 높음 □ 불확실	The authors declare that there are **no conflicts of interest** and there was **no financial support** regarding the publication of this paper.

연번(Ref ID)		57
1저자(출판연도)		De Luca (2019)
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	■ 낮음 □ 높음 □ 불확실	A **randomized block design** was used, the experimenter divided the subjects into subgroups called blocks, so that the variability within the blocks is less than the variability between the blocks. Thus, the subjects within each block were **randomly assigned** to the treatment conditions. The "blocks" were obtained from **software with randomization lists to assign** experimental patients (A) and monitor patients (B). A 2×2 block was used, with a similar number of patients enrolled in the two groups.
Allocation concealment (배정순서 은폐)	■ 낮음 □ 높음 □ 불확실	
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	언급없음
Blinding of outcome assessment (결과평가에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	언급없음
Incomplete outcome data (불충분한 결과자료)	□ 낮음 □ 높음 ■ 불확실	결측치에 대한 언급없음
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	프로토콜은 없지만, 연구방법에 언급된 모든 결과를 보고하고 있음 Materials and methods
Private funding support (민간 연구비 지원)	■ 낮음 □ 높음 □ 불확실	The authors declare that they have no conflict of interest.

연번(Ref ID)	58	
1저자(출판연도)	Nousia (2019)	
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	□ 낮음 □ 높음 ■ 불확실	Forty-six patients with MCI were **randomly divided** into two groups
Allocation concealment (배정순서 은폐)	□ 낮음 □ 높음 ■ 불확실	
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	언급없음
Blinding of outcome assessment (결과평가에 대한 눈가림)	■ 낮음 □ 높음 □ 불확실	The evaluation of the participants was performed separately by both a neurologist and an experienced neuropsychologist pre and post the intervention program. Both the neurologist and the neuropsychologist were **blind to the allocation** of participants to groups (training and control).
Incomplete outcome data (불충분한 결과자료)	■ 낮음 □ 높음 □ 불확실	46 MCI patients were enrolled in the study, **none** of whom **dropped out** during the training period.
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	프로토콜은 없지만, 연구방법에 언급된 모든 결과를 보고하고 있음
Private funding support (민간 연구비 지원)	■ 낮음 □ 높음 □ 불확실	The authors declare that they have **no** conflicts of interest.

연번(Ref ID)	59	
1저자(출판연도)	Withiel (2019)	
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	■ 낮음 □ 높음 □ 불확실	Randomization was performed with an online random sequence generator (http://www.randomization.com) in advance of the study and transcribed into randomly permuted fixed block sizes of 6 by an independent researcher.
Allocation concealment (배정순서 은폐)	■ 낮음 □ 높음 □ 불확실	Participants were assessed immediately following intervention and at a 6-week follow-up by a researcher independent of intervention delivery and blinded to treatment arm allocation.
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	□ 낮음 ■ 높음 □ 불확실	A parallel, 3-group, single-blind, randomized controlled trial
Blinding of outcome assessment (결과평가에 대한 눈가림)	■ 낮음 □ 높음 □ 불확실	Participants were assessed immediately following intervention and at a 6-week follow-up by a researcher independent of intervention delivery and blinded to treatment arm allocation.
Incomplete outcome data (불충분한 결과자료)	■ 낮음 □ 높음 □ 불확실	There was a 21% rate of attrition at the 6-week follow-up (27%, 25% and 11% drop-out rate for CCT, MSG and WC, respectively).
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	프로토콜은 없지만, 연구방법에 언급된 모든 결과를 보고하고 있음 - Primary outcome measure - Secondary outcome measures - Subjective memory
Private funding support (민간 연구비 지원)	□ 낮음 □ 높음 ■ 불확실	Training materials for the current research were prepared and funded by Lumos Labs in collaboration with researchers. The authors have no conflicts of interest to declare.

연번(Ref ID)		60
1저자(출판연도)		Byeon(2018)
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	□ 낮음 □ 높음 ■ 불확실	언급없음
Allocation concealment (배정순서 은폐)	□ 낮음 □ 높음 ■ 불확실	언급없음
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	언급없음
Blinding of outcome assessment (결과평가에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	언급없음
Incomplete outcome data (불충분한 결과자료)	■ 낮음 □ 높음 □ 불확실	결측치 없음
Selective reporting (선택적 보고)	□ 낮음 ■ 높음 □ 불확실	평가 도구가 방법에 소개되어 있으나 결과에는 제시되지 않음 The Korea version of global deterioration scale (GDS)
Private funding support (민간 연구비 지원)	■ 낮음 □ 높음 □ 불확실	This research was supported by Basic Science Research Program through the National Research Foundation of Korea (NRF) funded by the Ministry of Education (NRF-2018R1D1A1B07041091).

연번(Ref ID)		61, 62
1저자(출판연도)		Chandler (2017), Locke (2014)
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	■ 낮음 □ 높음 □ 불확실	Participants with MCI were **randomized** to either computer (BF) or calendar (MSS) training using **computer-generated randomization assignment**.
Allocation concealment (배정순서 은폐)	■ 낮음 □ 높음 □ 불확실	
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	언급 없음
Blinding of outcome assessment (결과평가에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	언급 없음
Incomplete outcome data (불충분한 결과자료)	□ 낮음 □ 높음 ■ 불확실	언급 없음
Selective reporting (선택적 보고)	□ 낮음 ■ 높음 □ 불확실	(Chandler, 2017) 일부 결과들이 그래프로만 제시되었음
Private funding support (민간 연구비 지원)	■ 낮음 □ 높음 □ 불확실	Acknowledgments: This project was funded by the **National Institutes of Health,** the National Institute of Nursing Research, NR012419, with further support from the **Alzheimer's Association**, NIRG-07-58843, the Emory Alzheimer's Disease Research Center, AG025688, and the Patient Centered Outcomes Research Institute, **PCORI**-CER-1306-01897. Data collection was supported by UL1 TR000135 from the National Center for Advancing Translational Sciences (NCATS). Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the NIH. **Conflicts of Interest:** The authors declare no conflict of interest. The funding sponsors had **no role** in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript; or in the decision to publish the results.

연번(Ref ID)	63	
1저자(출판연도)	Cooper (2017)	
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	■ 낮음 □ 높음 □ 불확실	The SCORE trial was a single-site, **randomized controlled trial (RCT).** Consented subjects were **randomly assigned** to 1 of the 4 treatment arms using a **priori blocked randomization** with **equal numbers** assigned to each of the 4 arms.
Allocation concealment (배정순서 은폐)	■ 낮음 □ 높음 □ 불확실	
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	연구자에 대한 눈가림 언급 없음 **Participants** were aware that there were multiple treatment arms in the study, but were **blinded** to treatment components andmethod of treatment assignment.
Blinding of outcome assessment (결과평가에 대한 눈가림)	■ 낮음 □ 높음 □ 불확실	**All measures** were administered by a research psychometrist, **blinded** to treatment assignment, who was located outside the TBI Clinic.
Incomplete outcome data (불충분한 결과자료)	□ 낮음 ■ 높음 □ 불확실	두 군간 결측치에 차이가 있음 - computer (baseline) 30 → (F/U) 18 - Traditional (baseline) 30 → (F/U) 27
Selective reporting (선택적 보고)	□ 낮음 ■ 높음 □ 불확실	다수 결과들이 그래프로만 제시됨 - Figure 2. Cognitive, psychological, and functional treatment outcomes and treatment maintenance.
Private funding support (민간 연구비 지원)	■ 낮음 □ 높음 □ 불확실	The funding organization/sponsor **(DVBIC*)** was involved in the design of the study, collection and management of the data, and review of the study findings. * Defense and Veterans Brain Injury Center The funder had no role in the interpretation of the data, preparation, review, or approval of the manuscript. The authors declare **no conflicts of interest.**

연번(Ref ID)	64	
1저자(출판연도)	Hagovska (2017)	
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	■ 낮음 □ 높음 □ 불확실	The project data analyst generated a **random sequence of numbers** to arbitrarily classify an equal number of participants into groups A and B by means of a **computer program**.
Allocation concealment (배정순서 은폐)	■ 낮음 □ 높음 □ 불확실	These numbers were placed **in an envelope**, which was subsequently **sealed.** The project manager (Z.O.) opened the envelope and informed participants of their group **assignment.**
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	□ 낮음 ■ 높음 □ 불확실	**Participants** were informed by the training staff that there were two types of training, but they were **not told** what intervention they would receive or the anticipated outcomes. The **training staff** were **not blinded.**
Blinding of outcome assessment (결과평가에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	언급 없음
Incomplete outcome data (불충분한 결과자료)	■ 낮음 □ 높음 □ 불확실	The strengths of the current study include a relatively high response rate (85%) and **low drop out rate**.
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	프로토콜은 없지만, 연구방법에 언급된 모든 결과를 보고하고 있음 – Outcome Variables
Private funding support (민간 연구비 지원)	■ 낮음 □ 높음 □ 불확실	The authors have disclosed **no** potential conflicts of interest, **financial** or otherwise.

연번(Ref ID)	65
1저자(출판연도)	Westerhof-Evers (2017)

영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	□ 낮음 □ 높음 ■ 불확실	This study was designed as a multicenter **randomized controlled trial**,
Allocation concealment (배정순서 은폐)	■ 낮음 □ 높음 □ 불확실	Balanced **assignment** (per 4 patients) took place, for which lots were **blindly drawn by a coworker** not involved in the study.
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	언급 없음
Blinding of outcome assessment (결과평가에 대한 눈가림)	■ 낮음 □ 높음 □ 불확실	**Research assistants blind** to treatment allocation carried out the neuropsychological assessments.
Incomplete outcome data (불충분한 결과자료)	■ 낮음 □ 높음 □ 불확실	there were almost **no dropouts**.
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	프로토콜은 없지만, 연구방법에 언급된 모든 결과를 보고하고 있음 - Primary outcome measure - Secondary outcome measures - Social cognition tests - Attention and executive functioning tests - Behavioral questionnaires - Other
Private funding support (민간 연구비 지원)	■ 낮음 □ 높음 □ 불확실	The authors declare **no conflicts of interest**.

연번(Ref ID)	66, 67	
1저자(출판연도)	Cho (2016), Jung (정진화) (2016)	
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	□ 낮음 □ 높음 ■ 불확실	48명의 대상자들은 상자에서 1~48까지 번호가 쓰여 있는 **종이를 뽑는 것**으로 **무작위로** 분류되어 NFB와 CACR, Control의 **세 그룹으로 나누었다.**
Allocation concealment (배정순서 은폐)	□ 낮음 □ 높음 ■ 불확실	
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	□ 낮음 ■ 높음 □ 불확실	"Single-blind를 위해 각 그룹의 치료시간을 다르게 하고 대상자들이 서로 치료내용에 대해 이야기하지 못하게 통제하였다.", 연구자에 대한 눈가림은 시행하지 않음
Blinding of outcome assessment (결과평가에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	"모든 치료와 평가는 숙련된 작업치료사에 의해 시행되었다."
Incomplete outcome data (불충분한 결과자료)	■ 낮음 □ 높음 □ 불확실	결측치가 두 중재군 간 유사하게 발생 "실험 기간 동안 NFB는 16명 중 2명, CACR은 16명 중 2명이 탈락되어 전체 대상자 중 NFB 14명, CACR 14명, Control 16명으로 44명이 실험에 끝까지 참여하고 사후평가를 하였다"
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	프로토콜이 존재하지 않지만 연구방법에서 사전에 정의해놓은 결과들이 연구결과에서 모두 제시되고 있음
Private funding support (민간 연구비 지원)	■ 낮음 □ 높음 □ 불확실	민간업체의 연구 지원에 대한 언급없음

연번(Ref ID)		68	
1저자(출판연도)		Jung(정경만) (2016)	
영역	비뚤림위험	사유	
Random sequence generation (무작위 배정순서 생성)	□ 낮음 □ 높음 ■ 불확실	"본 연구의 모든 대상자는 **카드 뽑기**를 통해 **무작위**로 연구군과 대조군을 각 11명씩 나누었다."라고 보고함	
Allocation concealment (배정순서 은폐)	□ 낮음 □ 높음 ■ 불확실		
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	언급없음	
Blinding of outcome assessment (결과평가에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	언급없음	
Incomplete outcome data (불충분한 결과자료)	■ 낮음 □ 높음 □ 불확실	결측치가 없음	
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	프로토콜이 존재하지 않지만 연구방법에서 사전에 정의해놓은 결과들이 연구결과에서 모두 제시되고 있음	
Private funding support (민간 연구비 지원)	□ 낮음 □ 높음 ■ 불확실	민간업체의 연구 지원에 대한 언급없음	

연번(Ref ID)	69
1저자(출판연도)	Han(한승협) (2015)

영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	□ 낮음 □ 높음 ■ 불확실	외상성 뇌손상 진단을 받은 10명의 환자를 대상으로 두 개의 그룹을 **무작위로** 선정하였음
Allocation concealment (배정순서 은폐)	□ 낮음 □ 높음 ■ 불확실	언급 없음
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	언급 없음
Blinding of outcome assessment (결과평가에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	언급 없음
Incomplete outcome data (불충분한 결과자료)	□ 낮음 □ 높음 ■ 불확실	언급 없음
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	프로토콜은 없지만, 연구방법에 언급된 모든 결과를 보고하고 있음 – 본 연구에서 실험 전·후 전두엽–집행기능의 변화를 알아보기 위하여 한국판 몬트리올 인지평가(Korean Montreal Cognitive Assessment, K–MoCA), 시계 그리기 검사(Executive Clock Drawing Test, ECDT), 선로잇기 검사(Trail Making Test, TMT), Rey–도형 검사(Rey Complex Figure Test, RCFT)를 실시하였다.
Private funding support (민간 연구비 지원)	□ 낮음 □ 높음 ■ 불확실	언급 없음

연번(Ref ID)	70	
1저자(출판연도)	Park (2015)	
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	■ 낮음 □ 높음 □ 불확실	After the previous testing session, all subjects were **randomly assigned** to either the control group (CG) or the experimental group (EG) in accordance with a **random numbers table.**
Allocation concealment (배정순서 은폐)	□ 낮음 □ 높음 ■ 불확실	
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	언급없음
Blinding of outcome assessment (결과평가에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	"All outcome measures were administered to the patients at baseline and at the end of treatment (after the 4-week intervention) **by the assistant researcher** with 5 years' experience in using the measures."
Incomplete outcome data (불충분한 결과자료)	■ 낮음 □ 높음 □ 불확실	결측치 없음
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	사전에 정해진 프로토콜은 없지만 사전에 계획된 것을 포함하여 예상되는 모든 결과를 보고하고 있다고 판단됨
Private funding support (민간 연구비 지원)	□ 낮음 □ 높음 ■ 불확실	민간업체의 연구 지원에 대한 언급없음

연번(Ref ID)		71
1저자(출판연도)		Richter (2015)
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	■ 낮음 □ 높음 □ 불확실	Following an elaborate diagnostic examination, patients were **allocated randomly,** using **a traditional lottery procedure with tickets,** to either the experimental or the control group
Allocation concealment (배정순서 은폐)	■ 낮음 □ 높음 □ 불확실	**Allocation** was done **blinded** with respect to the results of the neuropsychological assessment.
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	■ 낮음 □ 높음 □ 불확실	In this **double-blind** randomized control study(초록, 논의)
Blinding of outcome assessment (결과평가에 대한 눈가림)	■ 낮음 □ 높음 □ 불확실	Subsequently, the assessment was completed **by 2 psychologists blind to group** membership of the participant.
Incomplete outcome data (불충분한 결과자료)	■ 낮음 □ 높음 □ 불확실	결측치가 결과에 영향을 미치지 않을 것으로 판단하고, 결측치가 발생한 원인도 유사함
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	사전에 정해진 프로토콜은 없지만 사전에 계획된 것을 포함하여 예상되는 모든 결과를 보고하고 있다고 판단됨
Private funding support (민간 연구비 지원)	□ 낮음 ■ 높음 □ 불확실	Kim Merle Richter received **funding of Hasomed,** Inc (Magdeburg), which sells the RehaCom cognitive training battery.

연번(Ref ID)	72	
1저자(출판연도)	Kim(김동희) (2013)	
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	□ 낮음 □ 높음 ■ 불확실	**무작위로** 전산화 인지재활 프로그램(Rehacom)을 받는 실험군 15명, 전통적인 인지치료 중재를 받는 대조군 15명으로 나누었다.
Allocation concealment (배정순서 은폐)	□ 낮음 □ 높음 ■ 불확실	: 무작위 배정 순서에 대한 언급없음 : 무작위 배정 은폐에 대한 언급없음
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	언급 없음
Blinding of outcome assessment (결과평가에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	치료 전·후의 인지기능과 일상생활활동 수행능력의 평가는 일관성을 유지하기 위하여 본 연구자가 단독으로 실시하였다. : 결과 평가에 대한 언급없음
Incomplete outcome data (불충분한 결과자료)	■ 낮음 □ 높음 □ 불확실	결측치가 없음
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	사전에 정해진 프로토콜은 없지만 사전에 계획된 것을 포함하여 예상되는 모든 결과를 보고하고 있다고 판단됨
Private funding support (민간 연구비 지원)	□ 낮음 □ 높음 ■ 불확실	언급없음

연번(Ref ID)	73	
1저자(출판연도)	Kim(김수한) (2013)	
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	□ 낮음 □ 높음 ■ 불확실	"대상자 선별 기준에 부합하는 대상자 30명을 선발하여 선별된 대상자를 **무작위 배분**하여 총 두 집단으로 나누었다."
Allocation concealment (배정순서 은폐)	□ 낮음 □ 높음 ■ 불확실	: 무작위 배정에 대한 배정 순서 생성 언급 없음 : 무작위 배정에 대한 배정 순서 은폐 언급 없음
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	눈가림에 대한 언급없음
Blinding of outcome assessment (결과평가에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	결과평가 눈가림에 대한 언급없음
Incomplete outcome data (불충분한 결과자료)	■ 낮음 □ 높음 □ 불확실	결측치가 없음
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	사전에 정해진 프로토콜은 없지만 사전에 계획된 것을 포함하여 예장되는 모든 결과를 보고하고 있다고 판단됨
Private funding support (민간 연구비 지원)	□ 낮음 □ 높음 ■ 불확실	언급없음

연번(Ref ID)		74
1저자(출판연도)		Kim(김신균) (2013)
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	□ 낮음 □ 높음 ■ 불확실	"The subjects were 30 patients who were diagnosed with stroke and they were **randomly selected** to a proprioceptive training group(n=15), a cognitive training group(n=15)."
Allocation concealment (배정순서 은폐)	□ 낮음 □ 높음 ■ 불확실	: **초록에 무작위와 관련된 언급을 하였으나, 본문에 배정순서 생성 언급없음**
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	언급 없음
Blinding of outcome assessment (결과평가에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	초기 평가와 재평가는 일관성을 유지할 수 있도록 연구자와 각 1명의 물리치료사와 작업치료사에 의해 시행하였다.
Incomplete outcome data (불충분한 결과자료)	■ 낮음 □ 높음 □ 불확실	결측치가 없음
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	사전에 정해진 프로토콜은 없지만 사전에 계획된 것을 포함하여 예상되는 모든 결과를 보고하고 있다고 판단됨
Private funding support (민간 연구비 지원)	□ 낮음 □ 높음 ■ 불확실	언급없음

연번(Ref ID)		75
1저자(출판연도)		Lee (2013)
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	☐ 낮음 ☐ 높음 ■ 불확실	A randomized controlled trial with a single-blind research design~
Allocation concealment (배정순서 은폐)	☐ 낮음 ☐ 높음 ■ 불확실	The subjects were **randomly assigned** to CELP (n=6), TELP (n=6), and waiting-list control (n=7) groups.
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	☐ 낮음 ■ 높음 ☐ 불확실	A randomized controlled trial with **a single-blind** research design~
Blinding of outcome assessment (결과평가에 대한 눈가림)	■ 낮음 ☐ 높음 ☐ 불확실	Outcome evaluation of subjects before and after testing and at three-month follow-up was performed **by independent blinded assessors**.
Incomplete outcome data (불충분한 결과자료)	■ 낮음 ☐ 높음 ☐ 불확실	Most of the subjects completed all the outcome evaluations, including follow-up testing.
Selective reporting (선택적 보고)	■ 낮음 ☐ 높음 ☐ 불확실	프로토콜은 없지만, 연구방법에 언급된 모든 결과를 보고하고 있음 Primary outcome measures Secondary outcome measures
Private funding support (민간 연구비 지원)	■ 낮음 ☐ 높음 ☐ 불확실	The authors report **no conflicts of interest** in this work.

연번(Ref ID)		76
1저자(출판연도)		Herrera 2012)
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	□ 낮음 □ 높음 ■ 불확실	The 22 patients were randomly assigned into two groups (11 patients per group) 무작위 배정 순서 생성에 대한 구체적 언급없음
Allocation concealment (배정순서 은폐)	□ 낮음 □ 높음 ■ 불확실	The 22 patients were randomly assigned into two groups (11 patients per group) 배정순서 은폐에 대한 언급없음
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	연구참여자 혹은 연구자의 배정된 중재에 대한 눈가림 언급없음
Blinding of outcome assessment (결과평가에 대한 눈가림)	■ 낮음 □ 높음 □ 불확실	one administered and scored the pre-tests, post-tests, and follow-up tests (this person was kept blind to the group membership of patients),
Incomplete outcome data (불충분한 결과자료)	■ 낮음 □ 높음 □ 불확실	결측치(탈락된 대상자)가 없음
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	사전에 정해진 프로토콜은 없지만 사전에 계획된 것을 포함하여 예상되는 모든 결과를 보고하고 있다고 판단됨
Private funding support (민간 연구비 지원)	□ 낮음 □ 높음 ■ 불확실	언급없음

연번(Ref ID)		77
1저자(출판연도)		Kim(김영근) (2012)
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	□ 낮음 □ 높음 ■ 불확실	They were **randomly assigned** to CoTras Group (15 participants) and Control Group (15 participants).
Allocation concealment (배정순서 은폐)	□ 낮음 □ 높음 ■ 불확실	
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	언급 없음
Blinding of outcome assessment (결과평가에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	언급 없음
Incomplete outcome data (불충분한 결과자료)	□ 낮음 □ 높음 ■ 불확실	언급 없음
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	프로토콜은 없지만, 연구방법에 언급된 모든 결과를 보고하고 있음 – 측정도구: MVPT, LOTCA
Private funding support (민간 연구비 지원)	□ 낮음 □ 높음 ■ 불확실	언급 없음

연번(Ref ID)	78	
1저자(출판연도)	Hildebrandt (2011)	
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	☐ 낮음 ☐ 높음 ■ 불확실	The experiment was **a randomized controlled, double blind** experiment, comparing two treatment methods,
Allocation concealment (배정순서 은폐)	☐ 낮음 ☐ 높음 ■ 불확실	
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	■ 낮음 ☐ 높음 ☐ 불확실	**Patients** were **blind** for any expectations with respect to the different treatment strategies used in this experiment. **Assessment** of patients following training was done by a trained assistant, who was **blind to group** membership.
Blinding of outcome assessment (결과평가에 대한 눈가림)	■ 낮음 ☐ 높음 ☐ 불확실	
Incomplete outcome data (불충분한 결과자료)	■ 낮음 ☐ 높음 ☐ 불확실	All patients finished the treatment; there were **no drop-outs.**
Selective reporting (선택적 보고)	■ 낮음 ☐ 높음 ☐ 불확실	프로토콜은 없지만, 연구방법에 언급된 모든 결과를 보고하고 있음
Private funding support (민간 연구비 지원)	■ 낮음 ☐ 높음 ☐ 불확실	The authors confirm that there are **no conflicts of interest, financial interests,** and patent holdings related to this paper.

연번(Ref ID)		79
1저자(출판연도)		Spikman (2010)
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	■ 낮음 □ 높음 □ 불확실	prospective multicenter **randomized control trial (RCT)**... Suitable candidates were **blindly and randomly assigned** to either the experimental or the control condition per center.
Allocation concealment (배정순서 은폐)	■ 낮음 □ 높음 □ 불확실	Balanced **assignment** (per four patients) took place **by lot** **(two "control" and two "experimental")**. Lots were drawn **blindly by an employee not involved** in the study.
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	언급 없음
Blinding of outcome assessment (결과평가에 대한 눈가림)	■ 낮음 □ 높음 □ 불확실	At baseline (T0), immediately after treatment (T1), and 6 months post-treatment (T2), an extensive battery of tests and questionnaires was administered **by independent** **assessors who were blind** for treatment condition, except for the DEX-therapist version and the Executive Observation Scale (EOS), which were therapist-rated.
Incomplete outcome data (불충분한 결과자료)	■ 낮음 □ 높음 □ 불확실	At follow-up, **three** patients in the **experimental** group did **not show up** and **one control** patient dropped out due to logistical problems. (Figure 1)
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	프로토콜은 없지만, 연구방법에 언급된 모든 결과를 보고하고 있음 - Primary outcome measure - Adjunct outcome measures - Questionnaires and observation lists - Neuropsychological measures of executive and cognitive functioning
Private funding support (민간 연구비 지원)	■ 낮음 □ 높음 □ 불확실	This study was **supported by The Dutch Organization of** **Health Research and Development** (ZON-MW), Rehabilitation Research Program (**Grant** No. 1435.0009).

연번(Ref ID)		80
1저자(출판연도)		Man (2006)
영역	비뚤림위험	사유
Random sequence generation (무작위 배정순서 생성)	□ 낮음 □ 높음 ■ 불확실	A total of 109 subjects with ABI were recruited through a **two-stage process of random sampling** (drawn by lot from a list of services, then drawn by lot from patient/member lists) from all rehabilitation service clusters in Hong Kong.
Allocation concealment (배정순서 은폐)	□ 낮음 □ 높음 ■ 불확실	They were **randomly assigned** to one of the four study groups
Blinding of participants and personnel (연구 참여자, 연구자에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	In this **double-blinded** study
Blinding of outcome assessment (결과평가에 대한 눈가림)	□ 낮음 □ 높음 ■ 불확실	언급 없음
Incomplete outcome data (불충분한 결과자료)	■ 낮음 □ 높음 □ 불확실	**six** subjects **dropped out** for such reasons as ceasing to have interest in the study (n = 3), a deterioration in their medical condition (n = 1), to seek further medical treatment in China, and because they were preoccupied with other tasks (n = 2). Thus, **83** subjects were able to **complete** all of the training sessions, and their **final post-tests** were analyzed.
Selective reporting (선택적 보고)	■ 낮음 □ 높음 □ 불확실	프로토콜은 없지만, 연구방법에 언급된 모든 결과를 보고하고 있음 – Assessments
Private funding support (민간 연구비 지원)	□ 낮음 □ 높음 ■ 불확실	언급 없음