



Supplementary Fig. S1. Changes in total scores of the Korean-Montreal Cognitive Assessment (K-MoCA) and the Korean-Mini Mental State Examination (K-MMSE)

(A) Total score of the K-MoCA increased after (12 and 24) weeks of treatment, compared to the baseline ($p=0.015$, $p=0.008$, respectively). (B) Total mean score of the K-MMSE tends to slightly increase after (12 and 24) weeks of treatment compared to the baseline, but it was not statistically significant ($p=0.195$, $p=0.761$, respectively). *: $P<0.05$ compared with the score at the baseline by the Student's paired t-test, **: $P<0.001$ compared with the score at the baseline by the Student's paired t-test.

Supplementary Table S1. Detailed descriptions of the Korean medicine treatment used in this study.

Herbal formulae/dosage, acupuncture point	
Herbal medicine	
Decoction (water extract) ^a	
<i>Tonifying-Qi formula</i>	
- modified Jeungsonbaekchul-san & Gakbyeongyeonsu-tang	Ginseng Radix, Achyranthis Radix, Citri Unshius Pericarpium, Crataegi Fructus, Pueraria Root, Atractylodis Rhizoma Alba, Paeoniae Radix, Poria Sclerotium, Angelicae Gigantis Radix, Agastachis Herba, <u>Acori Graminei Rhizoma</u> , <u>Poria Sclerotium Cum Pini Radix</u> 4g, <u>Polygalae Radix</u> , <u>Aucklandiae Radix</u> , <u>Glycyrrhizae Radix et Rhizoma</u> 2 g, <u>Zingiberis Rhizoma Recens</u> 6 g. 120 mL, tid.
- modified Guibi-tang (Guipi-tang, Kihi-to)	Longan Arillus, Zizyphi Semen 12 g, Zingiberis Rhizoma Recens 8 g, Angelicae Gigantis Radix, Zizyphi Fructus 6 g, Astragali Radix, Ginseng Radix, Atractylodis Rhizoma Alba, <u>Acori Graminei Rhizoma</u> , <u>Massa Medicata Fermentata</u> , <u>Poria Sclerotium Cum Pini Radix</u> , <u>Crataegi Fructus</u> 4g, <u>Aucklandiae Radix</u> , <u>Polygalae Radix</u> , <u>Glycyrrhizae Radix et Rhizoma</u> 2 g. 120 mL, tid.
<i>Tonifying-Kidney formula</i>	
- modified Jaeumganghwa-tang (Ziyangjianghuo-tang, Jinkoka-to)	Paeoniae Radix, <u>Acori Graminei Rhizoma</u> , <u>Poria Sclerotium Cum Pini Radix</u> , <u>Longan Arillus</u> 6 g, Angelicae Gigantis Radix 5g, Rehmanniae Radix Preparata, Liriopsis seu Ophiopogonis Tuber, Atractylodis Rhizoma Alba, <u>Bupleuri Radix</u> , <u>Massa Medicata Fermentata</u> 4 g, Rehmanniae Radix Recens, Citri Unshius Pericarpium 3 g, Anemarrhenae Rhizoma, Phellodendri Cortex, <u>Glycyrrhizae Radix et Rhizoma</u> 2 g. 120 mL, tid.
- modified Yukmijihwang-hwan (Liuweidihuang-tang, Rokumijjo-to)	(variation 1) Rehmanniae Radix Preparata, <u>Longan Arillus</u> 12 g, Corni Fructus, Dioscoreae Rhizoma 8 g, Moutan Radicis Cortex, Poria Sclerotium, Alismatis Rhizoma 6g, <u>Acori Graminei Rhizoma</u> , <u>Massa Medicata Fermentata</u> 4 g, <u>Anemarrhenae Rhizoma</u> , <u>Alpiniae Oxyphyllae Fructus</u> , <u>Phellodendri Cortex</u> , <u>Polygalae Radix</u> 2 g. 120 mL, tid. (variation 2) Rehmanniae Radix Preparata 12 g, Corni Fructus, Dioscoreae Rhizoma, 8 g, Moutan Radicis Cortex, <u>Polygalae Radix</u> , <u>Longan Arillus</u> , <u>Poria Sclerotium Cum Pini Radix</u> , Poria Sclerotium, Alismatis Rhizoma 6 g, Atractylodis Rhizoma Alba, Acori Graminei Rhizoma, Massa Medicata Fermentata, Astragali Radix 4 g. 120 mL, tid.
- modified Gojineumja (Guzhenyinzi)	<u>Poria Sclerotium Cum Pini Radix</u> 8 g, Rehmanniae Radix Preparata, Acori Graminei Rhizoma 6 g, Ginseng Radix, Astragali Radix, <u>Gardeniae Fructus</u> , Dioscoreae Rhizoma, Angelicae Gigantis Radix, <u>Galli Gigeriae Endothelium Corneum</u> 4 g, Citri Unshius Pericarpium, Eucommiae Cortex, Poria Sclerotium, <u>Glycyrrhizae Radix et Rhizoma</u> 3 g, Atractylodis Rhizoma Alba, Corni Fructus, Phellodendri Cortex, Alismatis Rhizoma, Psoraleae Semen, <u>Polygalae Radix</u> 2 g. 120 mL, tid.
<i>Calming-Liver formula</i>	
- modified Ondam-tang (Wendan-tang, untan-to)	Cyperis Rhizoma, Pinelliae Tuber 10 g, <u>Crataegi Fructus</u> , Zingiberis Rhizoma Recens 8 g, Citri Unshius Pericarpium, Zizyphi Fructus 6 g, Phyllostachyos Caulis in Taeniam, Poria Sclerotium, Liriopsis seu Ophiopogonis Tuber, Ponciri Fructus Immaturus, Ginseng Radix, <u>Bupleuri Radix</u> , <u>Acori Graminei Rhizoma</u> , <u>Poria Sclerotium Cum Pini Radix</u> , <u>Massa Medicata Fermentata</u> , <u>Glycyrrhizae Radix et Rhizoma</u> 4 g, <u>Platycodonis Radix</u> 3 g, <u>Polygalae Radix</u> 2 g. 120 mL, tid.

- | | |
|---|--|
| <p>- modified Soyo-san
(Jiaweixiaoyao-san,
Kamishoyo-san)</p> | <p><u>Cyperi Rhizoma</u> 10 g, <u>Acori Graminei Rhizoma</u>, <u>Poria Sclerotium Cum Pini Radix</u>, <u>Cinnamomi Ramulus</u>, <u>Zingiberis Rhizoma Recens</u> 8 g, <u>Atractylodis Rhizoma Alba</u>, <u>Massa Medicata Fermentata</u>, <u>Paeoniae Radix</u>, <u>Crataegi Fructus</u> 6 g, <u>Poria Sclerotium</u>, <u>Angelicae Gigantis Radix</u>, <u>Curcumae Radix</u>, <u>Citri Unshius Pericarpium Immaturus</u>, <u>Bupleuri Radix</u>, <u>Liriopis seu Ophiopogonis Tuber</u>, <u>Meliae Fructus</u> 4 g, <u>Menthae Herba</u>, <u>Gardeniae Fructus</u>, <u>Polygalae Radix</u>, <u>Glycyrrhizae Radix et Rhizoma</u> 2 g. 120 mL, tid.</p> |
| <p>- modified Daeyoung-jeon
(Daying-jian, Taiei-sen)</p> | <p><u>Uncariae Ramulus cum Uncus</u> 12 g, <u>Rehmanniae Radix Preparata</u>, <u>Atractylodis Rhizoma</u> 8 g, <u>Cervi Cornu</u>, <u>Lycii Fructus</u>, <u>Angelicae Gigantis Radix</u>, <u>Eucommiae Cortex</u>, <u>Amomi Fructus</u>, <u>Achyranthis Radix</u>, <u>Cinnamomi Cortex</u>, <u>Citri Unshius Pericarpium</u>, <u>Pinelliae Tuber</u> 6 g, <u>Rehmanniae Radix</u>, <u>Glycyrrhizae Radix et Rhizoma</u>, <u>Zingiberis Rhizoma</u>, <u>Platycodonis Radix</u>, <u>Persicae Semen</u>, <u>Hordei Fructus Germinatus</u>, <u>Paeoniae Radix</u>, <u>Arecae Semen</u>, <u>Magnoliae Cortex</u> 4 g, <u>Angelicae Dahuricae Radix</u>, <u>Cnidii Rhizoma</u> 2 g. 120 mL, bid.</p> |

Granules (manufactured)

Tonifying-Qi formula

- | | |
|---|--|
| <p>- Bojungikgi-tang
(Buzhongyiqi-tang,
Hochuekki-to)</p> | <p><u>Astragali Radix</u>, <u>Atractylodis Rhizoma</u>, <u>Ginseng Radix</u> 1 g, <u>Angelicae Gigantis Radix</u> 0.75 g, <u>Bupleuri Radix</u>, <u>Zizyphi Fructus</u>, <u>Citri Unshius Pericarpium</u> 0.5 g, <u>Glycyrrhizae Radix et Rhizoma</u> 0.375g, <u>Cimicifugae Rhizoma</u> 0.25 g, <u>Zingiberis Rhizoma</u> 0.125 g. 1.875 g of granule, tid.</p> |
|---|--|

Tonifying-Kidney formula

- | | |
|--|---|
| <p>- Uchashinki-hwan
(Jishengshenqi-wan,
Goshajinki-gan)</p> | <p><u>Rehmanniae Radix</u> 1.7 g, <u>Achyranthis Radix</u>, <u>Corni Fructus</u>, <u>Dioscoreae Rhizoma</u>, <u>Plantaginis Semen</u>, <u>Alismatis Rhizoma</u>, <u>Poria Sclerotium</u>, <u>Moutan Radicis Cortex</u> 1.0 g, <u>Cinnamomi Cortex</u>, <u>Aconiti Lateralis Radix Preparata</u> 0.3 g. 2.5 g of granule, tid.</p> |
|--|---|

Calming-Liver formula

- | | |
|---|---|
| <p>- Ukgan-san
(Yigan-san, Yokukan-san)</p> | <p><u>Pinelliae Tuber</u> 1.67 g, <u>Atractylodis Rhizoma Alba</u>, <u>Poria Sclerotium</u> 1.33 g, <u>Angelicae Gigantis Radix</u>, <u>Uncariae Ramulus cum Uncus</u>, <u>Cnidii Rhizoma</u>, <u>Citri Unshius Pericarpium</u> 1.0 g, <u>Bupleuri Radix</u> 0.67 g, <u>Glycyrrhizae Radix et Rhizoma</u> 0.5 g. 3 g of granule, tid.</p> |
|---|---|

Acupuncture	GV20, GV24, EX-HN3, CV12, TE4, TE5, GB40, GB37, KI4 (in A hospital) EX-HN1, CV12, ST22, ST25, LI4, LR3, ST36 (in B hospital)
Electroacupuncture	GV20, GV24, EX-HN3, CV12, TE4, TE5, GB40, GB37, KI4
Pharmacopuncture	placenta-pharmacopuncture on CV3
Cupping	Bladder Meridian-first line of upper back, GB21, BL23
Moxibustion	CV12

^a Herbs added to the standard formulae are underlined.