Table H-15. Strength of evidence for Key Question 2: general exercise effect across interventions and populations

| **Intervention****Category,****Intervention** | **Comparator** | **Outcome** | **Number of RCTs (Participants)****Author Year****(See Appendix B for Full Citation)** | **Study Limitations** | **Consistency** | **Precision** | **Reporting Bias** | **Strength of Evidence** | **Findings, Direction and Magnitude of Effect** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **All-exercise interventions** (General exercise effect across interventions/populations) | Usual Care | 6MWT | 25 (1196)Baguet, 2018Hebert, 2011Kargarfard, 2018Young, 2019Kim, 2015Kalron, 2017Duff, 2018Dalgas, 2010Taylor, 2013Hogan, 2014Garrett, 2012abSandroff, 2017Sangelaji, 2014Sangelaji, 2016Ebrahimi, 2015Jones, 2014aBahrami, 2019aCallesen, 2019Fosdahl, 2019bTollar, 2020Yazgan, 2019Moraes, 2020Ahmadizadeh 2019 | Moderate | Consistent | Precise | Undetected | Moderate for benefit | 6MWT: Pooled analysis: MD -32.94, 95% CI -46.07 to -19.81, I2=78% |
| All exercise | Usual Care | Walking in MS | 25 (1529) Baguet, 2018Hebert, 2011Kargarfard, 2018Young, 2019Kalron, 2017Duff, 2018Dalgas, 2010Hogan, 2014Garrett, 2012a/bSandroff, 2017Sangelaji, 2014Sangelaji, 2016Ebrahimi, 2015Carling, 2017Cakit, 2010Tarakci, 2013Fox, 2016Forsberg, 2016Nilsagard, 2012Callesen, 2019Ahmadi, 213Arntzen, 2020Tollar, 2020Moraes, 2020Yazgan, 2019Faramarzi, 2020Ozkul, 2020b | Moderate  | Consistent |  Precise | Not detected | High for benefit | Pooled analysis (19 studies): 6MWT: MD -42.70, 95% CI -57.05 to -28.35, I2=75%Pooled analysis (9 studies): 10MWT: MD -1.44, 95% CI -2.74 to -0.13, I2=90%Pooled analysis (9 studies): MS Walking Scale: MD -2.88, 95% CI -4.80 to -0.96, I2=33% |
| All exercise | Usual Care | 10MWT | 14 (659)Fox, 2016Dalgas, 2010Carling, 2017In, 2018Sangelaji, 2016Cakit, 2010Ebrahimi, 2015Tarakci, 2013Jones, 2014aBahrami, 2019Elnaggar, 2019Scholtes, 2012Ahmandi, 2013Arntzen, 2020 | Moderate | Consistent | Imprecise | Not detected | Moderate for benefit | MD -1.24, 95% CI -2.04 to -0.44 |
| All exercise | Usual Care | Function:GMFM-66 in CPGMFM-66D in CPGMFM-66E in CPTUG | 7 (353)Fowler, 2010Bryant, 2012Scholtes, 2010Deutz, 2017Herrero, 2012Slaman, 2015Van Wely, 20142 (78)Wallard, 2018Taylor, 20133 (151)Wallard, 2018Taylor, 2013Deutz, 20172 (70)Hsieh, 2018Kaya Kara, 2019 | Moderate | Consistent | Imprecise | Not detected | Low-strength evidence for benefit | GMFM-66: MD -0.58, 95% CI -1.62 to 0.45, I2=79%GMFM-66D: MD -0.89, 95% CI -7.33 to 5.55, I2=60%GMFM-66E: MD -3.73, 95% CI -5.78 to -1.67, I2=0%TUG: MD -1.05, 95% CI -1.35 to -0.76) |
| All exercise | Usual Care | Walking in CP | 7 (234)Kim, 2015Taylor, 2013Bahmani, 2019Fosdahl, 2019bAhmadizadeh, 2019Elnagger, 2019Scholtes, 2012 | Moderate | Consistant | Imprecise | No detected | Low for no clear benefit | Pooled analysis (4 trials) 6MWT: MD 6.85, 95% CI -13.39 to 27.08, I2=0%Pooled analysis (3 trials) 10MWT: MD -0.46, 95% CI -1.55 to 0.63, I2=44% |
| All exercise | Usual Care | BBS | 19 (1006)Gervasoni, 2014Kargarfard, 2018Afrasiabifar, 2018Forsberg, 2016Carling, 2017Gandolfi, 2015Hsieh, 2018Vermohlen, 2018Sangelaji, 2014Sangelaji, 2016Ebrahimi, 2015Tarakci, 2013Brichetto, 2015Tollar, 2020Ozkul, 2020Yazgan, 2019Hota, 2020Ahmandi, 2013Kalron, 2017 | Moderate | Consistent | Precise | Not detected | Moderate for benefit | MD -3.64, 95% CI -4.23 to -3.04, I2=68% |
| All exercise | Usual Care | TUG | 19 (N=882)Negaresh, 2018Russo, 2018Young, 2019Duff, 2018Bulguroglu, 2017Kalron, 2017Carling, 2017Forsberg, 2016Claerbout, 2012Nilsagard, 2012Hsieh, 2018In, 2018Cakit, 2010Ebrahimi, 2015Jones, 2014aKaya Kara, 2019Ozkul, 2020Yazgan, 2019Faramarzi, 2020 | Moderate | Consistent | Imprecise | Undetected | Low-strength evidence for benefit | TUG: MD -0.66, -1.28 to -0.04, I2=85% |
| All exercise | Usual Care | TUG in MS | 15 (N=743)Negaresh, 2018Russo, 2018Young, 2019Duff, 2018Bulguroglu, 2017Kalron, 2017Carling, 2017Forsberg, 2016Claerbout, 2012Nilsagard, 2012Cakit, 2010Ebrahimi, 2015Ozkul, 2020Yazgan, 2019 | Moderate | Consistent | Precise | Undetected | Moderate-strength evidence for no clear benefit | TUG: MD -0.30, 95% CI -1.18 to 0.59, I2=89% |
| All exercise | Usual Care | BBS in MS | 17 (906)Gervasoni, 2014Kargarfard, 2018Afrasiabifar, 2018Forsberg, 2016Carling, 2017Gandolfi, 2015Vermohlen, 2018Sangelaji, 2014Sangelaji, 2016Ebrahimi, 2015Tarakci, 2013Ahmadi, 2013Tollar, 2020Kalron, 2017Brichetto, 2015Ozkul, 2020Yazgan, 2019 | Moderate | Consistent | Precise | Not detected | Moderate for benefit | BBS: MD -3.56, 95% CI -4.58 to -2.54, I2=77% |
| All exercise | Usual Care | Function in CP | 11 (500)Hsieh, 2018Kaya Kara, 2019Fowler, 2010Bryant, 2012Schlotes, 2010Deutz, 2017Herrero, 2012Mutoh, 2019Slaman, 2015Van Wely, 2014 | Moderate | Consistent | Imprecise | Not detected | Low for benefit | BBS: MD -3.09, 95% CI -4.60 to -1.58Pooled TUG: -1.05, 95% CI -1.35 to -0.76, I2=0%Pooled GMFM-66: MD -0.58, 95% CI -1.62 to 0.45, I2=79% |
| All exercise | Usual Care | Function in SCI | 4 (129)Norouzi, 2019Hota, 2020Jones, 2014In, 2018 | Moderate | Consistent | Imprecise | Not detected |  Low for benefit | Pooled BBS: MD -4.53, 95% CI -6.46 to -2.61, I2=0%6MWT: MD -32.97, 95% CI -68.17 to 2.23Pooled analysis (2 trials) 10MWT: MD -5.06, 95% CI -13.29 to 3.15, I2=55%Pooled analysis (2 trials) TUG: -10.33, 95% CI -37.10 to 16.45, I2=61% |

Abbreviations: : 6MWT = 6-Minute Walk Test; 10MWT = 10-Meter Walk Test; BBS: Berg Balance Scale; CP = cerebral palsy; GMFM-66 = Gross Motor Function Measure 66; GMFM-66(D) = Gross Motor Function Measure 66 dimension D (standing); GMFM-66(E) = Gross Motor Function Measure 66 dimension E (walking, running, jumping); MD = mean difference; MS = multiple sclerosis; NA = not applicable; RCT = randomized controlled trial; SCI = spinal cord injury; TUG = Timed Up and Go Test