

Supplemental Table 1. Search Strategy

Database	Search terms	n
Medline (via Ovid)	(Exp Patient Acceptance of Health Care/ or Exp Patient Satisfaction/ or Attitude of Health Personnel/ or Exp Refusal to Treat/) OR (Accept* or adherence or complian* or satisfaction or utilisabilit* or "ease of us*" or intention* or opportunit* or experience* or burden or attitude* or ethical or cost* or preference* or treat* or perspective* or usabilit*).ti,ab AND "Exoskeleton Device/" or "Orthotic Devices/" OR (Exoskeleton or robotic or "Orthotic Device*" or orthose*).ti,ab. AND exp "Spinal Cord Injuries"/ or exp "Spinal Cord Diseases"/ OR ("Spinal cord injur*" or "Spinal Cord Disease*").ti,ab.	513
CINAHL (via Ebsco)	(MH "Patient Compliance") or (MH "Professional Compliance") or (MH "Patient-Reported Outcomes") or (MH "Patient Satisfaction+") or (MH "Attitude of Health Personnel+") or (MH "Patient Attitudes") OR TI (Accept* or adherence or complian* or satisfaction or utilisabilit* or "ease of us*" or intention*, or opportunit* or experience* or burden* or attitude* or ethical* or cost* or preference* or treat* or perspective* or usabilit*) OR AB (Accept* or adherence or complian* or satisfaction or utilisabilit* or "ease of us*" or intention*, or opportunit* or experience* or burden or attitude* or ethical* or cost* or preference* or treat* or perspective* or usabilit*) AND (MH "Exoskeleton Devices") or (MH "Orthoses") OR AB (Exoskeleton or robotic or othose* or "Orthotic Device*") OR TI (Exoskeleton or robotic or orthose* or "Orthotic Device*") AND (MH "Spinal Cord Injuries+") or (MH "Spinal Cord Diseases+") OR TI (("Spinal cord injur*" or "Spinal Cord Disease*")) OR AB (("Spinal cord injur*" or "Spinal Cord Disease*"))	280
Embase	patient attitude'/exp or 'health personnel attitude'/exp OR accept*:ab,ti or adherence:ab,ti or complian*:ab,ti or satisfaction:ab,ti or utilisabilit*:ab,ti or 'ease of us*:ab,ti or intention*:ab,ti or opportunit*:ab,ti or experience*:ab,ti or burden:ab,ti or attitude*:ab,ti or ethical*:ab,ti or cost*:ab,ti or preference*:ab,ti or treat*:ab,ti or perspective*:ab,ti or usabilit*:ab,ti AND exoskeleton (rehabilitation)/exp OR exoskeleton:ti,ab or robotic:ti,ab or "Orthotic Device*":ti,ab or orthose*:ti,ab AND spinal cord injury'/exp or 'spinal cord disease'/de OR spinal cord injur*:ab,ti OR 'spinal cord disease*':ab,ti	490
Web of Science	accept* or adherence or complian* or satisfaction or utilisabilit* OR 'ease of us*' or intention* or opportunit* or experience* or burden or attitude* or ethical* or cost* or preference* or treat* or perspective* or usabilit* AND exoskeleton or robotic or "Orthotic Device*" or orthose* AND spinal cord injur*' or 'spinal cord disease'	776

Supplemental Table 2. Mixed Methods Appraisal Tool Checklist

			Screening questions						
First author	Year	Citation	Are there clear research questions?	Do the collected data allow to address the research questions?	criteria1	criteria2	criteria3	criteria4	criteria5
Qualitative studies									
			1.1. Is the qualitative approach appropriate to answer the research question?	1.2. Are the qualitative data collection methods adequate to address the research question?	1.3. Are the findings adequately derived from the data?	1.4. Is the interpretation of results sufficiently substantiated by data?	1.5. Is there coherence between qualitative data sources, collection, analysis and interpretation?	1.1. Is the qualitative approach appropriate to answer the research question?	1.2. Are the qualitative data collection methods adequate to address the research question?
Charbonneau	2022	Charbonneau, R., Loyola-Sanchez, A., McIntosh, K., MacKean, G., & Ho, C. (2022). Exoskeleton use in acute rehabilitation post spinal cord injury: A qualitative study exploring patients' experiences. The journal of spinal cord medicine, 45(6), 848–856. https://doi.org/10.1080/10790268.2021.1983314	Yes	Yes	Yes	Yes	Yes	Yes	Yes

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First author	Year	Citation	Screening questions		criteria1	criteria2	criteria3	criteria4	criteria5
			Are there clear research questions?	Do the collected data allow to address the research questions?					
Ehrlich-Jones	2021	Ehrlich-Jones, L., Crown, D. S., Kinnett-Hopkins, D., Field-Fote, E., Furbish, C., Mummidisetty, C. K., Bond, R. A., Forrest, G., Jayaraman, A., & Heinemann, A. W. (2021). Clinician Perceptions of Robotic Exoskeletons for Locomotor Training After Spinal Cord Injury: A Qualitative Approach. Archives of physical medicine and rehabilitation, 102(2), 203–215. https://doi.org/10.1016/j.apmr.2020.08.024	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Evans	2022	Evans, R. W., Bantjes, J., Shackleton, C. L., West, S., Derman, W., Albertus, Y., & Swartz, L. (2022). "I was like intoxicated with this positivity": the politics of hope amongst participants in a trial of a novel spinal cord injury rehabilitation technology in South Africa. Disability and rehabilitation. Assistive technology, 17(6), 712–718. https://doi.org/10.1080/17483107.2020.1815086	Yes	Yes	Yes	Yes	Yes	Yes	Yes

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First author	Year	Citation	Screening questions		criteria1	criteria2	criteria3	criteria4	criteria5
			Are there clear research questions?	Do the collected data allow to address the research questions?					
Heinemann	2018	Heinemann, A. W., Jayaraman, A., Mummidisetty, C. K., Spraggins, J., Pinto, D., Charlifue, S., Tefertiller, C., Taylor, H. B., Chang, S. H., Stampas, A., Furbish, C. L., & Field-Fote, E. C. (2018). Experience of Robotic Exoskeleton Use at Four Spinal Cord Injury Model Systems Centers. <i>Journal of neurologic physical therapy : JNPT</i> , 42(4), 256–267. https://doi.org/10.1097/NPT.0000000000000235	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kinnett-Hopkins	2020	Kinnett-Hopkins, D., Mummidisetty, C. K., Ehrlich-Jones, L., Crown, D., Bond, R. A., Applebaum, M. H., Jayaraman, A., Furbish, C., Forrest, G., Field-Fote, E., & Heinemann, A. W. (2020). Users with spinal cord injury experience of robotic Locomotor exoskeletons: a qualitative study of the benefits, limitations, and recommendations. <i>Journal of neuroengineering and rehabilitation</i> , 17(1), 124. https://doi.org/10.1186/s12984-020-00752-9	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Supplemental Table 2. Mixed Methods Appraisal Tool Checklist

First author	Year	Citation	Screening questions		criteria1	criteria2	criteria3	criteria4	criteria5
			Are there clear research questions?	Do the collected data allow to address the research questions?					
Manns	2019	Manns, P. J., Hurd, C., & Yang, J. F. (2019). Perspectives of people with spinal cord injury learning to walk using a powered exoskeleton. Journal of neuroengineering and rehabilitation, 16(1), 94. https://doi.org/10.1186/s12984-019-0565-1	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Thomas sen	2019	Thomassen, G. K., Jørgensen, V., & Normann, B. (2019). "Back at the same level as everyone else"-user perspectives on walking with an exoskeleton, a qualitative study. Spinal cord series and cases, 5, 103. https://doi.org/10.1038/s41394-019-0243-3	Yes	Yes	Yes	Yes	Yes	No	No

Non-randomized studies

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First author	Year	Citation	Screening questions		criteria1	criteria2	criteria3	criteria4	criteria5
			Are there clear research questions?	Do the collected data allow to address the research questions?					
			3.1. Are the participants representative of the target population?	3.2. Are measurements appropriate regarding both the outcome and intervention (or exposure)?	3.3. Are there complete outcome data?	3.4. Are the confounders accounted for in the design and analysis?	3.5. During the study period, is the intervention administered (or exposure occurred) as intended?	3.1. Are the participants representative of the target population?	3.2. Are measurements appropriate regarding both the outcome and intervention (or exposure)?
Benson	2016	Benson, I., Hart, K., Tussler, D., & van Middendorp, J. J. (2016). Lower-limb exoskeletons for individuals with chronic spinal cord injury: findings from a feasibility study. <i>Clinical rehabilitation</i> , 30(1), 73–84. https://doi.org/10.1177/0269215515575166	Yes	Yes	No	Yes	No	No	Yes

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First author	Year	Citation	Screening questions		criteria1	criteria2	criteria3	criteria4	criteria5
			Are there clear research questions?	Do the collected data allow to address the research questions?					
Birch	2017	Birch, N., Graham, J., Priestley, T., Heywood, C., Sakel, M., Gall, A., Nunn, A., & Signal, N. (2017). Results of the first interim analysis of the RAPPER II trial in patients with spinal cord injury: ambulation and functional exercise programs in the REX powered walking aid. Journal of neuroengineering and rehabilitation, 14(1), 60. https://doi.org/10.1186/s12984-017-0274-6	Yes	Yes	Yes	No	Yes	No	Yes
Corbianco	2021	Corbianco, S., Cavallini, G., Dini, M., Franzoni, F., D'Avino, C., Gerini, A., & Stampacchia, G. (2021). Energy cost and psychological impact of robotic-assisted gait training in people with spinal cord injury: effect of two different types of devices. Neurological sciences : official journal of the Italian Neurological Society and of the Italian Society of Clinical Neurophysiology, 42(8), 3357–3366. https://doi.org/10.1007/s10072-020-04954-w	Yes	Yes	Yes	No	Yes	No	Yes

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First author	Year	Citation	Screening questions		criteria1	criteria2	criteria3	criteria4	criteria5
			Are there clear research questions?	Do the collected data allow to address the research questions?					
del-Ama	2014	Del-Ama, A. J., Gil-Agudo, A., Pons, J. L., & Moreno, J. C. (2014). Hybrid gait training with an overground robot for people with incomplete spinal cord injury: a pilot study. <i>Frontiers in human neuroscience</i> , 8, 298. https://doi.org/10.3389/fnhum.2014.00298	Yes	Yes	No	No	No	No	Yes
Fundarò	2018	Fundarò, C., Giardini, A., Maestri, R., Traversoni, S., Bartolo, M., & Casale, R. (2018). Motor and psychosocial impact of robot-assisted gait training in a real-world rehabilitation setting: A pilot study. <i>PloS one</i> , 13(2), e0191894. https://doi.org/10.1371/journal.pone.0191894	Yes	Yes	No	Yes	Yes	No	Yes

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First author	Year	Citation	Screening questions		criteria1	criteria2	criteria3	criteria4	criteria5
			Are there clear research questions?	Do the collected data allow to address the research questions?					
Kwon	2020	Kwon, S. H., Lee, B. S., Lee, H. J., Kim, E. J., Lee, J. A., Yang, S. P., Kim, T. Y., Pak, H. R., Kim, H. K., Kim, H. Y., Jung, J. H., & Oh, S. W. (2020). Energy Efficiency and Patient Satisfaction of Gait With Knee-Ankle-Foot Orthosis and Robot (ReWalk)-Assisted Gait in Patients With Spinal Cord Injury. <i>Annals of rehabilitation medicine</i> , 44(2), 131–141. https://doi.org/10.5535/arm.2020.44.2.131	Yes	Yes	Yes	No	Yes	No	Yes
Platz	2016	Platz, T., Gillner, A., Borgwaldt, N., Kroll, S., & Roschka, S. (2016). Device-Training for Individuals with Thoracic and Lumbar Spinal Cord Injury Using a Powered Exoskeleton for Technically Assisted Mobility: Achievements and User Satisfaction. <i>BioMed research international</i> , 2016, 8459018. https://doi.org/10.1155/2016/8459018	Yes	Yes	Yes	Yes	Yes	No	Yes

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First author	Year	Citation	Screening questions		criteria1	criteria2	criteria3	criteria4	criteria5
			Are there clear research questions?	Do the collected data allow to address the research questions?					
Postol	2021	Postol, N., Spratt, N. J., Bivard, A., & Marquez, J. (2021). Physiotherapy using a free-standing robotic exoskeleton for patients with spinal cord injury: a feasibility study. Journal of neuroengineering and rehabilitation, 18(1), 180. https://doi.org/10.1186/s12984-021-00967-4	Yes	Yes	No	No	No	No	Yes
Sale	2018	Sale, P., Russo, E. F., Scarton, A., Calabrò, R. S., Masiero, S., & Filoni, S. (2018). Training for mobility with exoskeleton robot in spinal cord injury patients: a pilot study. European journal of physical and rehabilitation medicine, 54(5), 745–751. https://doi.org/10.23736/S1973-9087.18.04819-0	Yes	Yes	No	No	Yes	No	Yes

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First author	Year	Citation	Screening questions		criteria1	criteria2	criteria3	criteria4	criteria5
			Are there clear research questions?	Do the collected data allow to address the research questions?					
Stampacchia	2016	Stampacchia, G., Rustici, A., Bigazzi, S., Gerini, A., Tombini, T., & Mazzoleni, S. (2016). Walking with a powered robotic exoskeleton: Subjective experience, spasticity and pain in spinal cord injured persons. <i>NeuroRehabilitation</i> , 39(2), 277–283. https://doi.org/10.3233/NRE-161358	Yes	Yes	No	No	Yes	No	Yes
Quantitative descriptive studies									
			4.1. Is the sampling strategy relevant to address the research question?	4.2. Is the sample representative of the target population ?	4.3. Are the measurements appropriate?	4.4. Is the risk of nonresponse bias low?	4.5. Is the statistical analysis appropriate to answer the research question?	4.1. Is the sampling strategy relevant to address the research question?	4.2. Is the sample representative of the target population ?

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First author	Year	Citation	Screening questions		criteria1	criteria2	criteria3	criteria4	criteria5
			Are there clear research questions?	Do the collected data allow to address the research questions?					
Gagnon	2019	Gagnon, D. H., Vermette, M., Duclos, C., Aubertin-Leheudre, M., Ahmed, S., & Kairy, D. (2019). Satisfaction and perceptions of long-term manual wheelchair users with a spinal cord injury upon completion of a locomotor training program with an overground robotic exoskeleton. Disability and rehabilitation. Assistive technology, 14(2), 138–145. https://doi.org/10.1080/17483107.2017.1413145	Yes	Yes	Yes	Yes	No	No	Yes
Lemaire	2017	Lemaire, E. D., Smith, A. J., Herbert-Copley, A., & Sreenivasan, V. (2017). Lower extremity robotic exoskeleton training: Case studies for complete spinal cord injury walking. NeuroRehabilitation, 41(1), 97–103. https://doi.org/10.3233/NRE-171461	Yes	Yes	No	No	Yes	Yes	No

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			Are there clear research questions?	Do the collected data allow to address the research questions?					
Muijzer-Witteveen	2018	Muijzer-Witteveen, H., Sibum, N., van Dijksseldonk, R., Keijsers, N., & van Asseldonk, E. (2018). Questionnaire results of user experiences with wearable exoskeletons and their preferences for sensory feedback. <i>Journal of neuroengineering and rehabilitation</i> , 15(1), 112. https://doi.org/10.1186/s12984-018-0445-0	Yes	Yes	Yes	No	No	Yes	No
Quiles	2020	Quiles, V., Ferrero, L., Ianez, E., Ortiz, M., Megia, A., Comino, N., Gil-Agudo, A. M., & Azorin, J. M. (2020). Usability and acceptance of using a lower-limb exoskeleton controlled by a BMI in incomplete spinal cord injury patients: a case study. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society. IEEE Engineering in Medicine and Biology Society. Annual International Conference</i> , 2020, 4737–4740. https://doi.org/10.1109/EMBC44109.2020.9175738	Yes	Yes	Yes	No	Yes	No	Yes

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First author	Year	Citation	Screening questions		criteria1	criteria2	criteria3	criteria4	criteria5
			Are there clear research questions?	Do the collected data allow to address the research questions?					
Sale	2016	Sale, P., Russo, E. F., Russo, M., Masiero, S., Piccione, F., Calabrò, R. S., & Filoni, S. (2016). Effects on mobility training and de-adaptations in subjects with Spinal Cord Injury due to a Wearable Robot: a preliminary report. BMC neurology, 16, 12. https://doi.org/10.1186/s12883-016-0536-0	Yes	Yes	No	Yes	No	Yes	Yes