Supplementary Table 4. Summary of baseline characteristics of included studies

Study	Year	Country	Setting	Intervention	Design	Control		Intervention	
						Participants No. (males)	Age in months	Participants No (males)	Age in months
Blackwood[3)]	2021	UK	Mixed ICU (medical, surgical)	Protocolized sedation	Cluster RCT	4,155 (2,410)	9 (1-47)	4,688 (2,716)	7 (1-45)
Chomat[4)]	2021	USA	Cardiac ICU	Protocolized sedation	Retrospective cohort study	50	0.23 (0.13-3.12)	35	0.39 (0.22-2.60)
Curley[5)]	2015	USA	Mixed ICU (medical, surgical)	Protocolized sedation	cluster RCT	1,224 (681)	31.2 (7.2-110.4)	1,225 (667)	16.8 (3.6-84)
Deeter[6)]	2011	USA	Mixed ICU (medical, surgical, cardiac)	Protocolized sedation	Retrospective cohort study	153 (85)	36 [60][a)]	166 (88)	31.2 [56.4][a)]
Gaillard-Le Roux[7)]	2017	France	Mixed ICU (medical, surgical, cardiac)	Protocolized sedation	Prospective cohort study	97 (56)	6.06 (2.4-44)	97 (54)	5.93 (2.6-43)
Hanser[8)]	2020	Germany	Cardiac ICU	Protocolized sedation	Retrospective cohort study	33	3.7 (2.1-4.8)	32	4.3 (3.6-5.4)
Jin[9)]	2007	South Korea	Medical PICU	Protocolized sedation	Prospective cohort study	20 (9)	21.7 [25.2][a)]	21 (8)	20.1 [30.7][a)]
Keogh[10)]	2015	Australia	Mixed ICU (medical, surgical)	Protocolized sedation	Prospective cohort study	75 (45)	24.96 (67.2)[b)]	63 (38)	21 (54)[b)]
Kleiber[11)]	2016	Australia	Cardiac ICU	Protocolized sedation	Retrospective cohort study	33 (24)	0.26 (2.04)[b)]	33 (15)	0.30 (1.45)[b)]
Kozin[12)]	2015	USA	Surgical PICU* (LTR surgery)	Protocolized sedation weaning	Retrospective cohort study	16 (8)	30.6 [17.04][a)]	12 (10)	22.68 [15.48][a)]
Neunhoeffer[13)]	2015	Germany	Mixed (medical, surgical, cardiac)	Protocolized sedation	Prospective cohort study	165 (78)	39.72 [0-216][c)]	172 (91)	35.4 [0-216][c)]

Neunhoeffer[14)]	2016	Germany	Surgical PICU	Protocolized sedation	Prospective cohort study	116 (57)	86.2 [12-186][d)]	110 (57)	81.4 [12-180][d)]
Saelim[15)]	2019	Thailand	Mixed (medical, surgical)	Protocolized sedation	Prospective cohort study	58 (32)	17.9 (5.5-46.2)	58 (27)	26.8 (7.7-90.6)
Sanchez-Pinto[16)]	2018	USA	Mixed (medical, surgical)	Protocolized sedation weaning	Prospective cohort study	68 (40)	25.2 (7.2-117.6)	39 (20)	27.6 (4.8-170.4)
Solodiuk[17)]	2019	USA	Mixed (medical, surgical, cardiac)	Protocolized sedation weaning	Prospective cohort study	219 (105)	2.4 (0.12-16.8)	233 (128)	9.6 (0.48-73.2)
Tiacharoen[18)]	2020	India	Mixed (medical, surgical)	Protocolized sedation weaning	Pilot RCT	11 (5)	20.76 (6.36-65.28)	19 (12)	18.84 (9.72-58.92)
Verlaat[19)]	2013	Netherlands	Mixed (medical, surgical)	Daily sedation interruption	Pilot RCT	15 (6)	2 (0-35)	15 (11)	1 (0-14)
Wilson[20)]	2021	USA	Mixed (medical, trauma, surgical, cardiac)	Protocolized sedation weaning	Retrospective Cohort Study	75 (36)	7.2 (2.4-34.8)	102 (56)	4.8 (1.2-31.2)
Achuff[21)]	2022	USA	Cardiac ICU	Protocolized sedation weaning	Retrospective cohort study	27 (19)	0.27 (0.15-0.8	27 (15)	0.2 (0.15-0.28)
Alfraiʲ[22)]	2023	Kuwait	Mixed (medical, surgical)	Protocolized sedation	Retrospective cohort study	73 (34)	36.84 (14.4-103.2)	61 (32)	24 (12.84-80.04)
Dokken[23)]	2023	Norway	Mixed (medical, surgical)	Protocolized sedation	Prospective cohort study	40 (20)	6 (1–21)	40 (26)	5.5 (0.3–24.8)

King[24)]	2023	USA	Cardiac ICU	Protocolized sedation weaning	Prospective cohort study	46 (27)	1.6 [2.57]	48 (30)	1.83 [2.6]
Leu[25)]	2019	USA	Surgical PICU	Protocolized sedation	Retrospective cohort study	4 (2)	0.87 [0.55]	12 (7)	0.67 [0.39]
Loberger[26)]	2022	USA	Mixed (medical, surgical)	Protocolized sedation	Prospective cohort study	253 (159	43 (12-122.5)	332 (170)	57 (15-143)
Shildt[27)]	2021	USA	Mixed (medical, surgical)	Protocolized sedation	Retrospective cohort study	131 (80)	45.12 [10.08, 123.6)	293 (167)	52.92 (12.48, 139.2)
Taffarel[28)]	2023	Argentina	Mixed (medical, surgical)	Protocolized sedation	Retrospective cohort study	99 (58)	5.8 (3.1, 17.5)	92 (55)	8.2 (3.1, 50.3)

Data are given as median (interquartile ranges).

RCT, randomized controlled trial; ICU, intensive care unit; PICU, pediatric ICU.

Except: [a)]Presented in mean [standard deviation], [b)]Presented in median (interquartile range), [c)]Presented in mean [range], [d)]Presented in median [range].