Table S1 Absolute change and relative change of AHI, CAHI and OAHI

Study ID	AHI with ATZ	AHI without ATZ	Absolute change in AHI	Percentage of change in AHI	CAHI with ATZ	CAHI without ATZ	CAHI absolute change	Percentage of change in CAHI	OAHI with ATZ	OAHI without ATZ	OAHI absolute change	Percentage of change in OAHI
Central												
DeBacker 1995	12.8(2.9)	37.2(6.2)	24.4	65.59%	6.6(2.9)	25.5(6.8)	18.9	74.12%	0.3(0.1)	3.5(1.5)	3.2	91.43%
Fontana 2011	23(13)	36(16)	13	36.11%	NR	NR	NR	NR	NR	NR	NR	NR
Ginter 2020	28.8(22.9)	39.3(24.1)	10.5	26.72%	0.6(1.5)	6.3(13.1)	5.7	90.48%	NR	NR	NR	NR
Javaheri 2006	34(20)	57(28)	23	40.35%	23(21)	49(28)	26	53.06%	2(5)	1(2)	-1	-100%
Naghan 2019	64.8(43.5)	89.8(42.5)	25	27.84%	6.4(22.89)	20(40.37)	13.6	68%	2.8(10.67)	4.7(7.33)	1.9	40.43%
Sharp 1985 CSA	82(31.11)	83(35.36)	1	1.20%	NR	NR	NR	NR	NR	NR	NR	NR
Ulrich 2015	7(17.78)	18(25.19)	11	61.11%	NR	NR	NR	NR	NR	NR	NR	NR
Verbraecken 1998	11(3)	39(10)	28	71.79%	4(2)	25(10)	21	84%	1(1)	0(0)	1	100%
White 1982	12(8)	54(12)	42	77.78%	NR	NR	NR	NR	NR	NR	NR	NR
Obstructive												
Sharp 1985 OSA	88.8(7.8)	89(4.9)	0.2	0.22%	NR	NR	NR	NR	NR	NR	NR	NR
Whyte 1988	26(20)	50(26)	24	48%	NR	NR	NR	NR	NR	NR	NR	NR
Unknown and mixed type												
Apostolo 2014	21.1(16.9)	30.8(13.8)	9.7	31.49%	NR	NR	NR	NR	NR	NR	NR	NR
Inoue 1999	19.1(17.3)	27.1(17.4)	8	29.52%	NR	NR	NR	NR	NR	NR	NR	NR
Sakamoto 1995	20.1(22.1)	34(23.9)	13.9	40.88%	NR	NR	NR	NR	NR	NR	NR	NR
Sharp 1985	57.5(15.3)	64.75(17.39)	7.25	11.20%	NR	NR	NR	NR	NR	NR	NR	NR
Tojima 1988	18.1(5.8)	25(6.7)	6.9	27.6%	NR	NR	NR	NR	NR	NR	NR	NR

Figure S1 Risk of bias

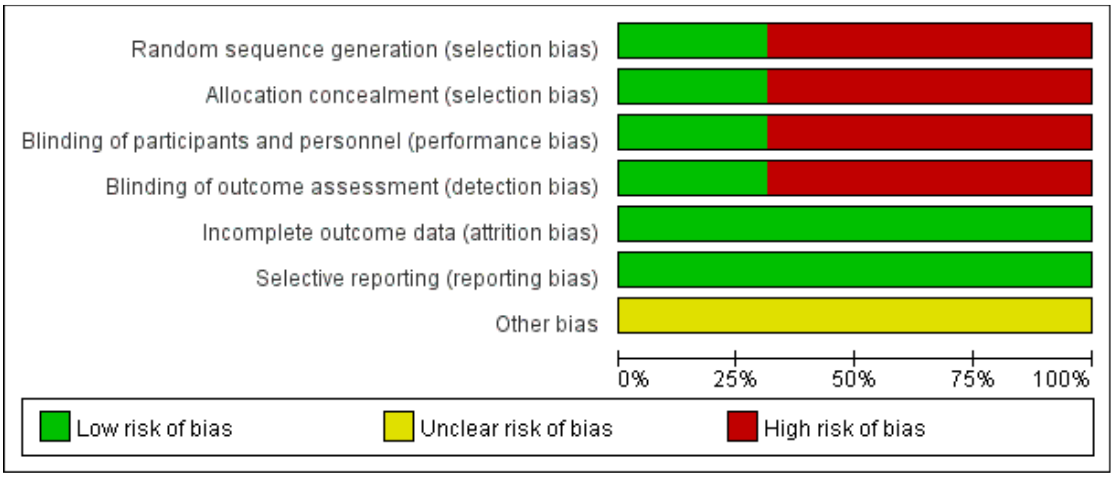


Figure S2 Risk of bias summary

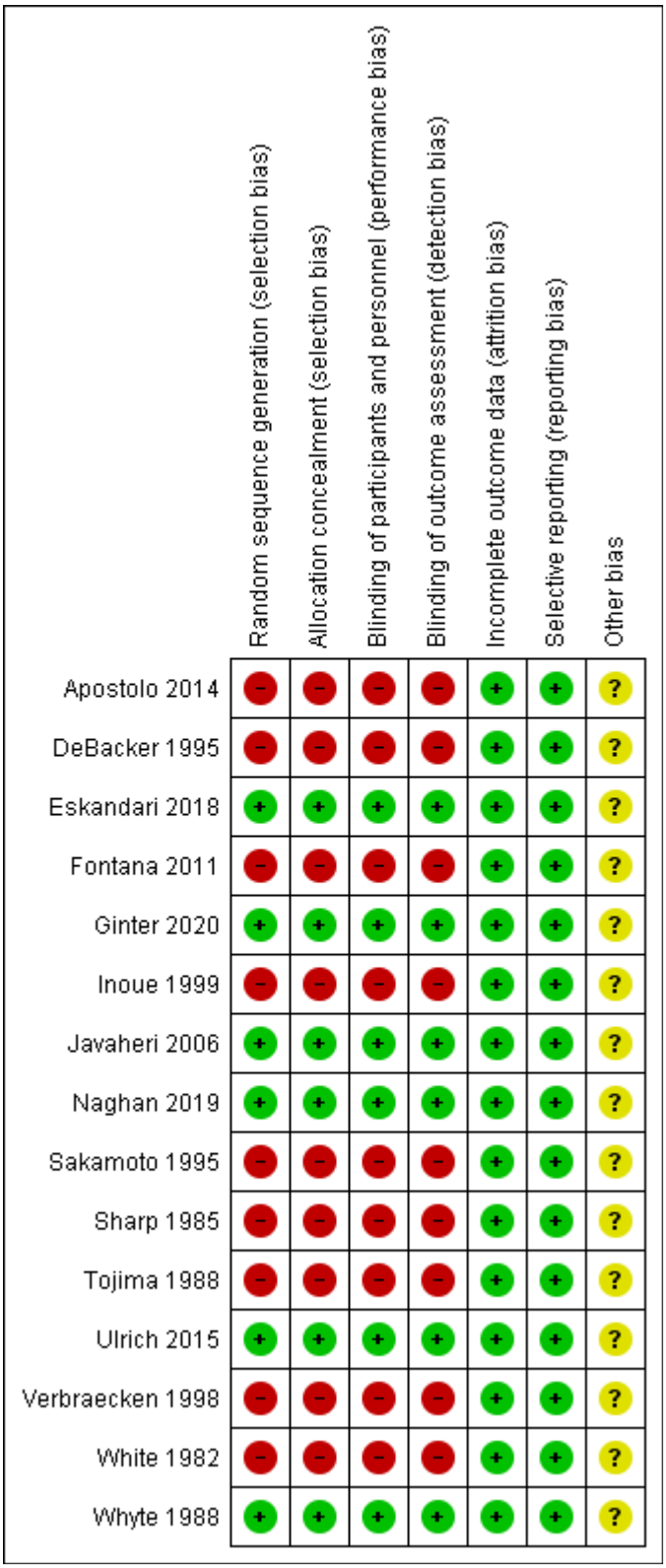


Figure S3 Publication bias

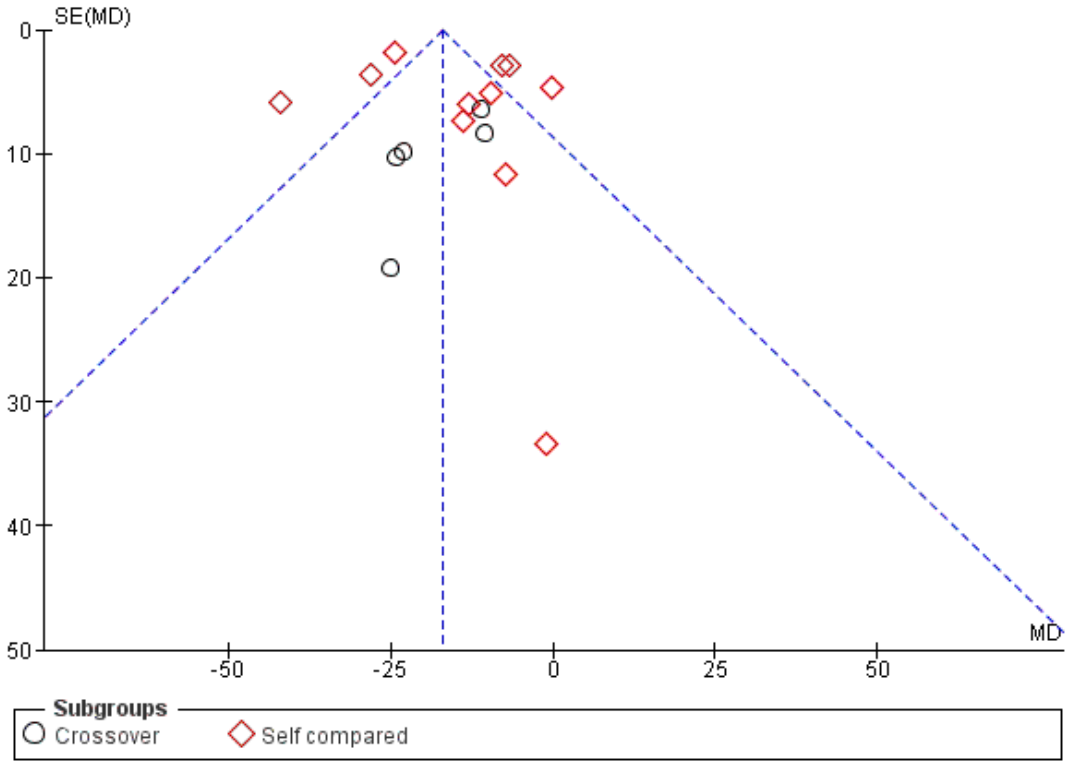


Figure S4 Subgroup analysis of AHI according to the design of study

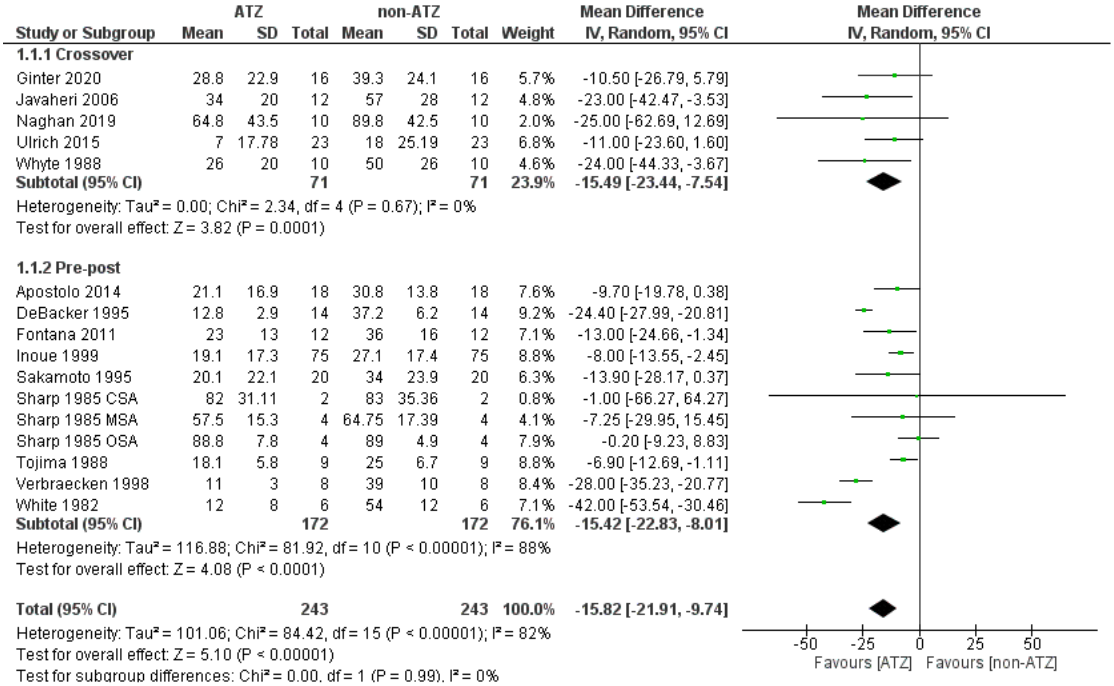


Figure S5 Subgroup analysis of AHI according to the dominant sleep apnea type

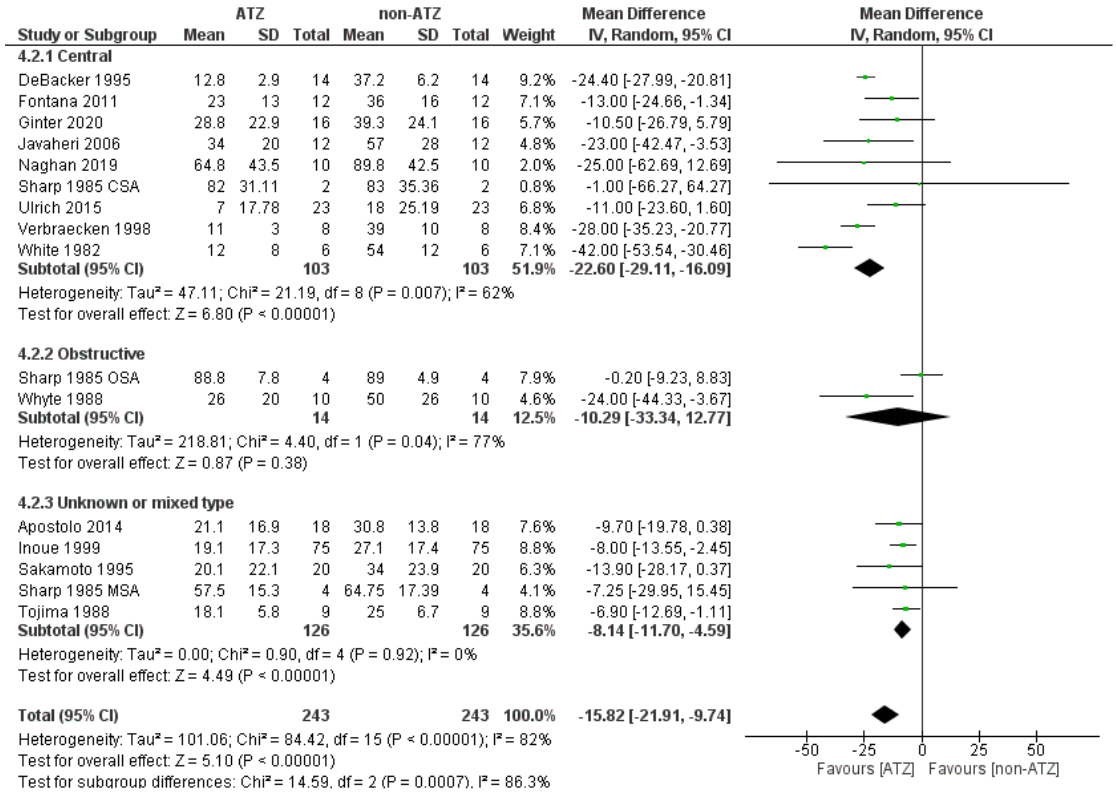
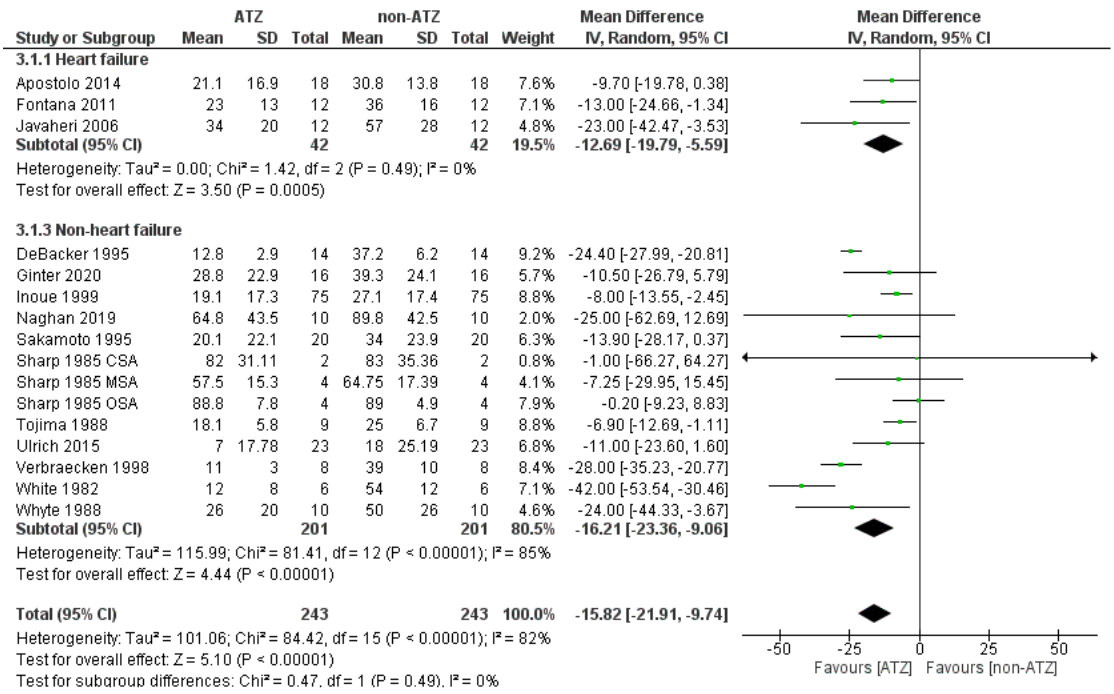


Figure S6 AHI divided by heart failure



CAI divided by heart failure

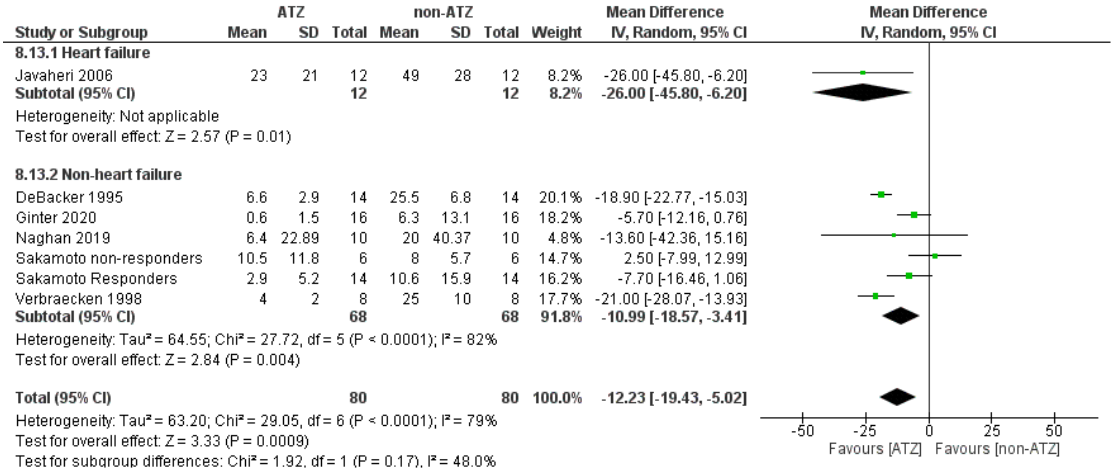


Figure S8 OAI divided by heart failure

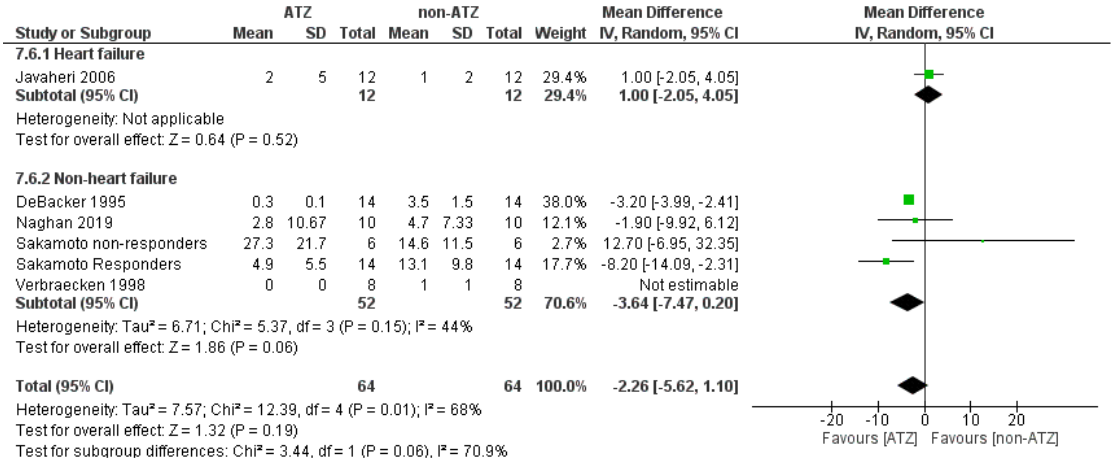


Figure S9 Respiratory events duration

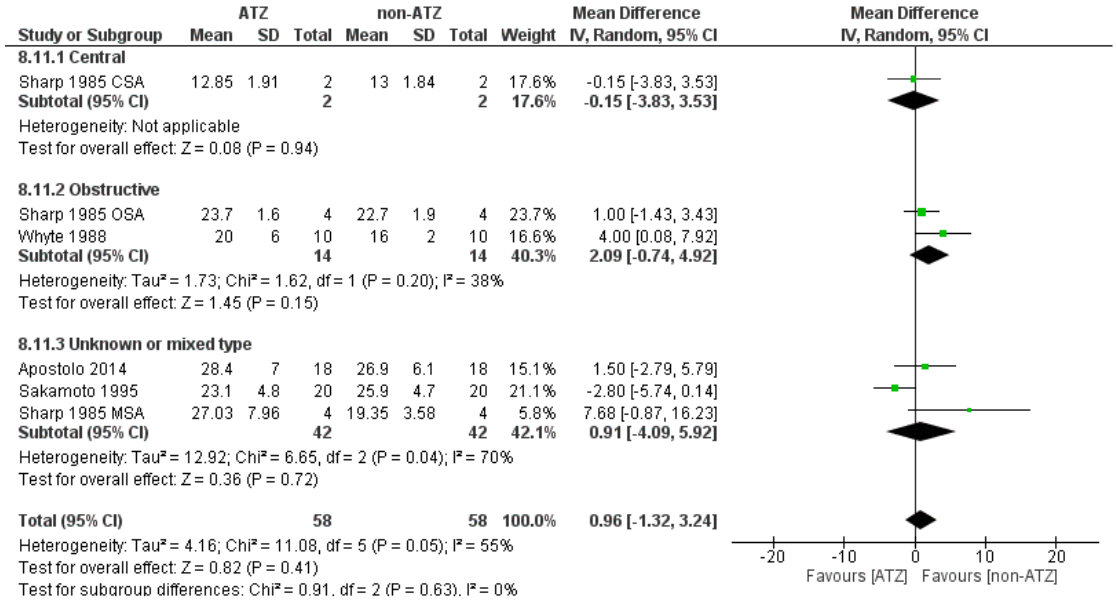
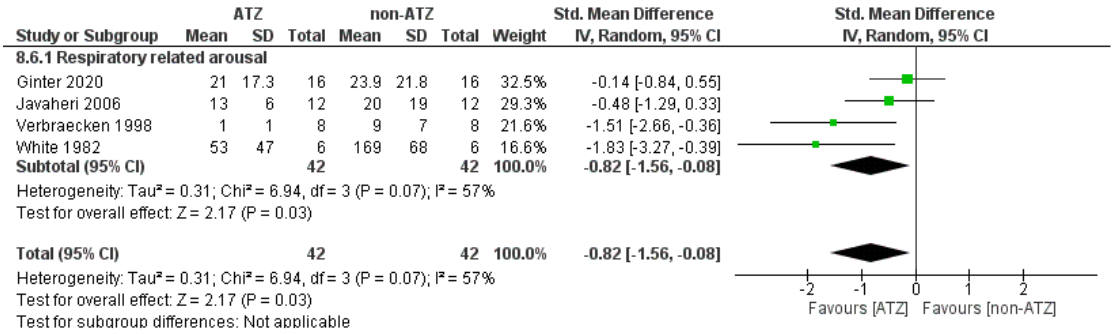


Figure S10 Respiratory related arousal index



All the included studies enrolled patients with central sleep apnea

Figure S11 Lowest SaO_2

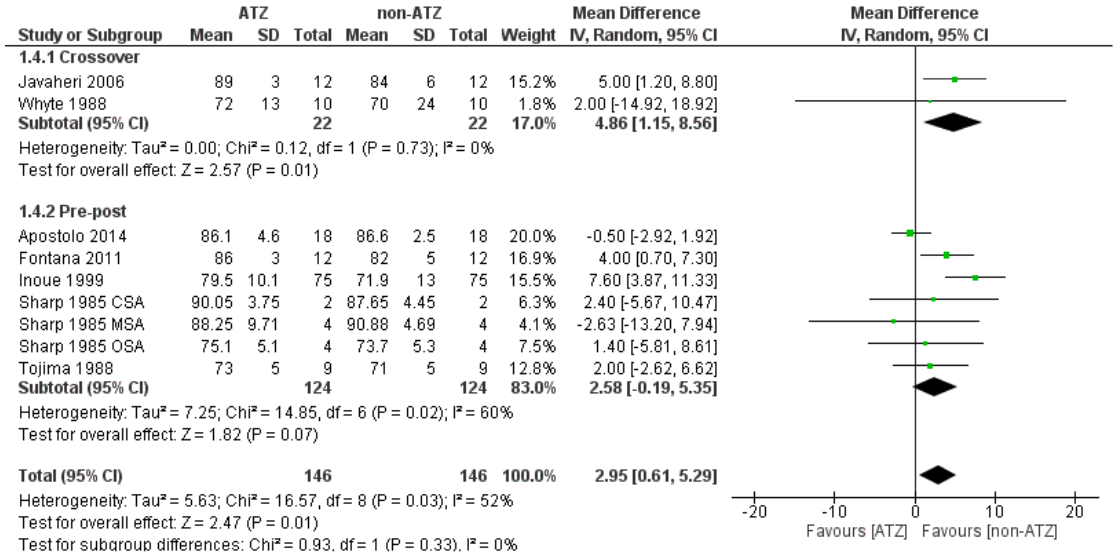


Figure S12 Lowest SaO_2 divided by the type of sleep apnea

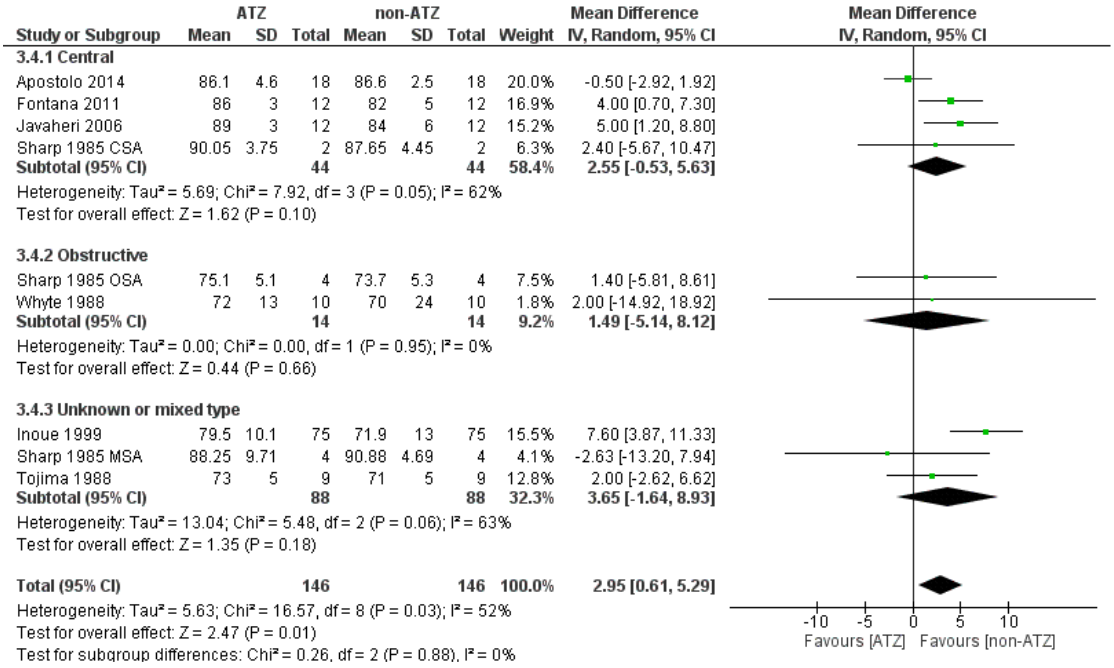


Figure S13 Mean SaO_2

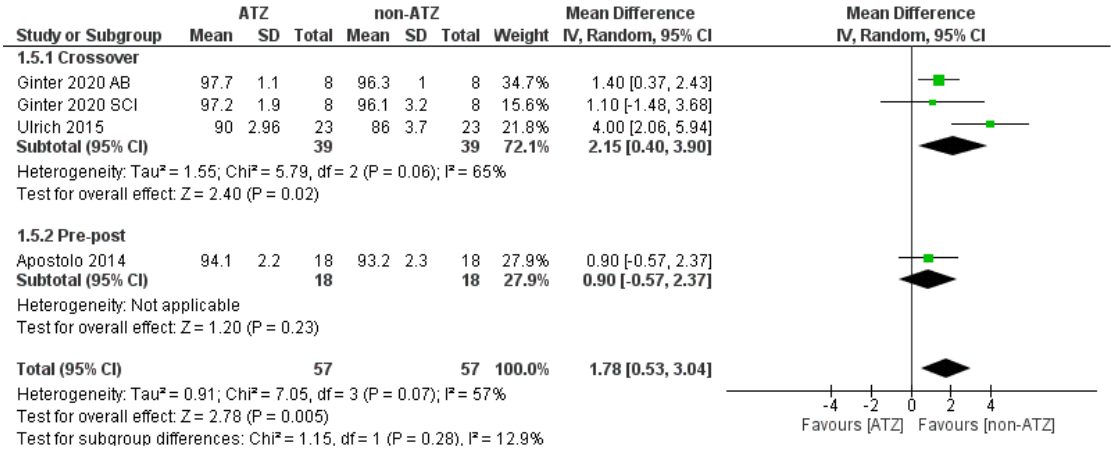


Figure S14 Mean SaO_2 divided by type of sleep apnea

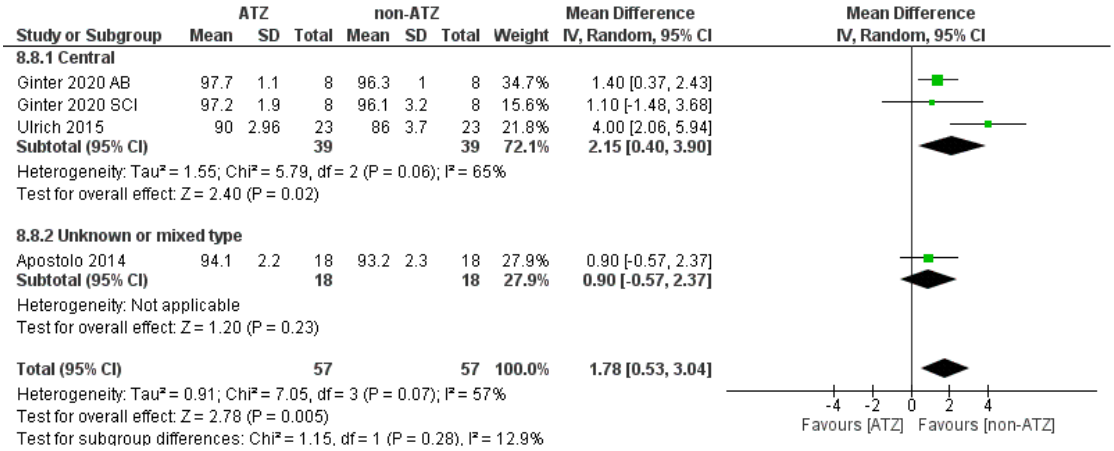


Figure S15 TST

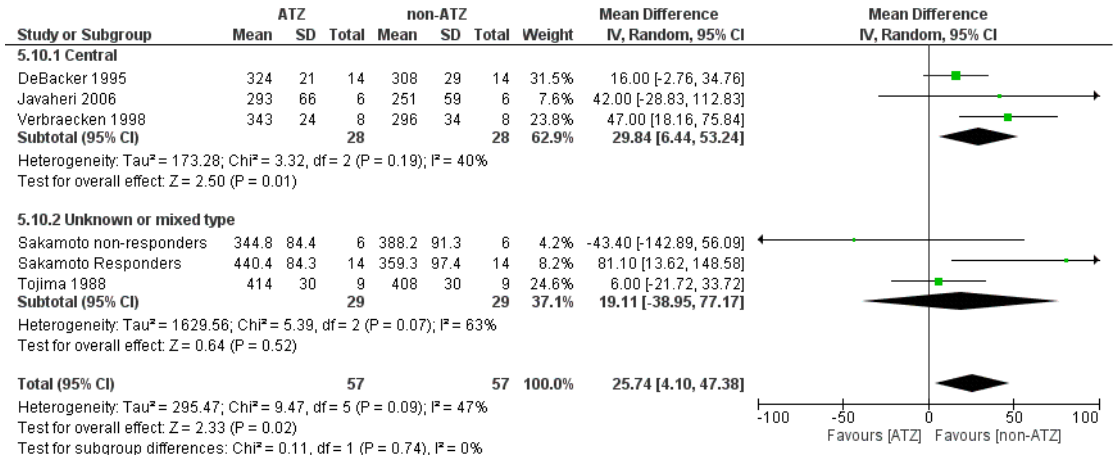


Figure S16 Sleep efficiency

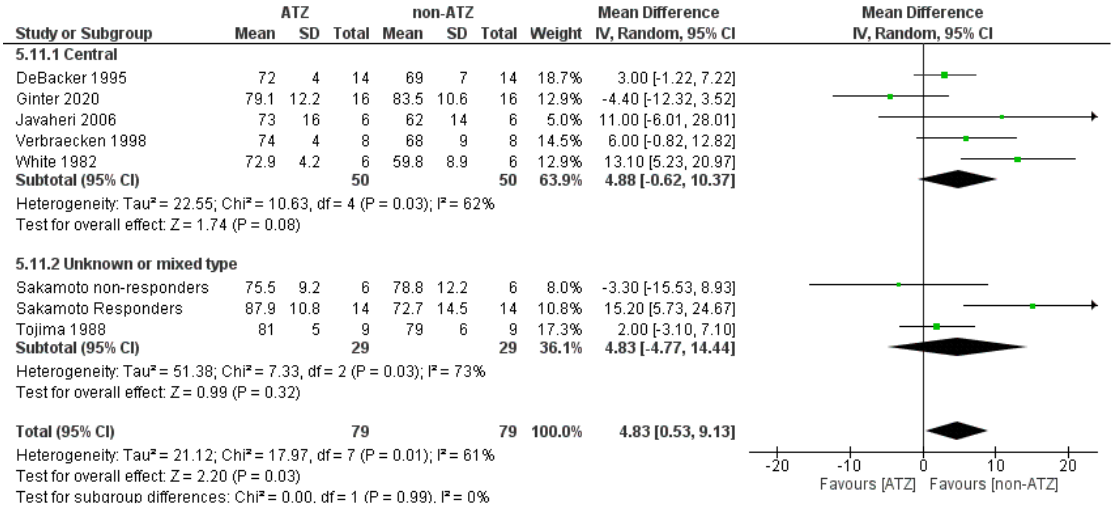


Figure S17 N1 stage of sleep

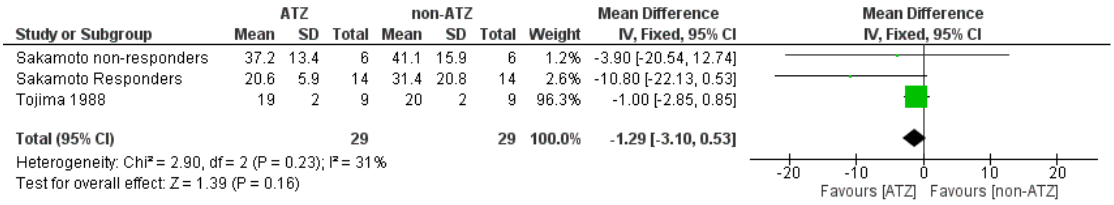


Figure S18 Slow wave sleep

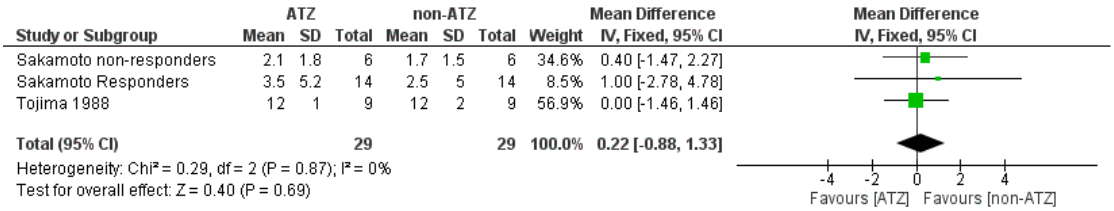


Figure S19 Rapid eye movement sleep

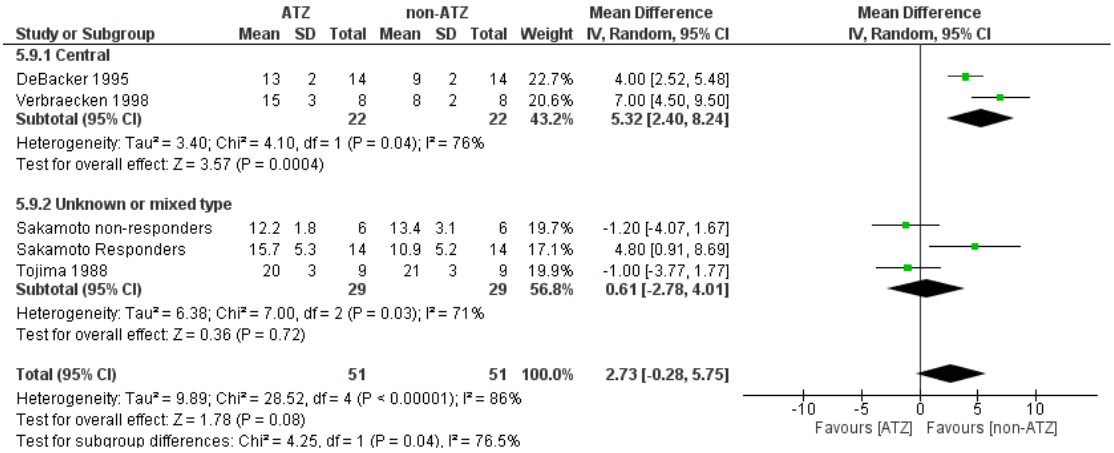


Figure S20 N2 stage of sleep

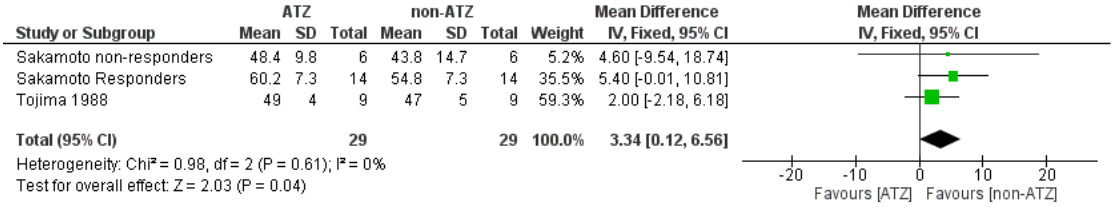


Figure S21 Slope of hypercapnia ventilator response

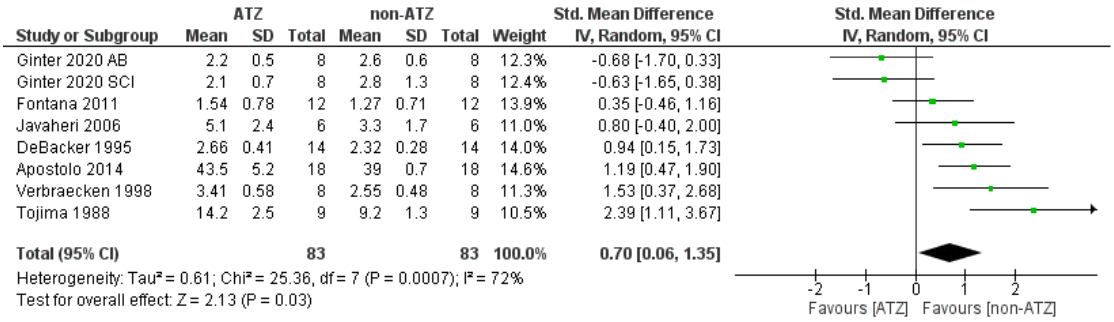


Figure S22 pH

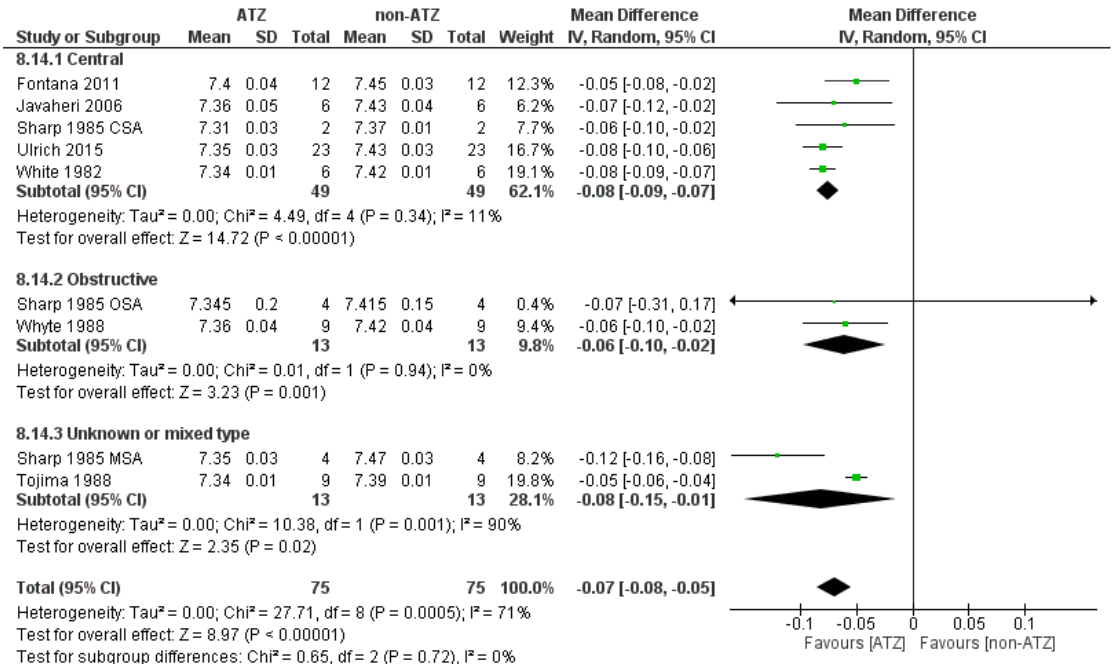


Figure S23 $PaCO_2$

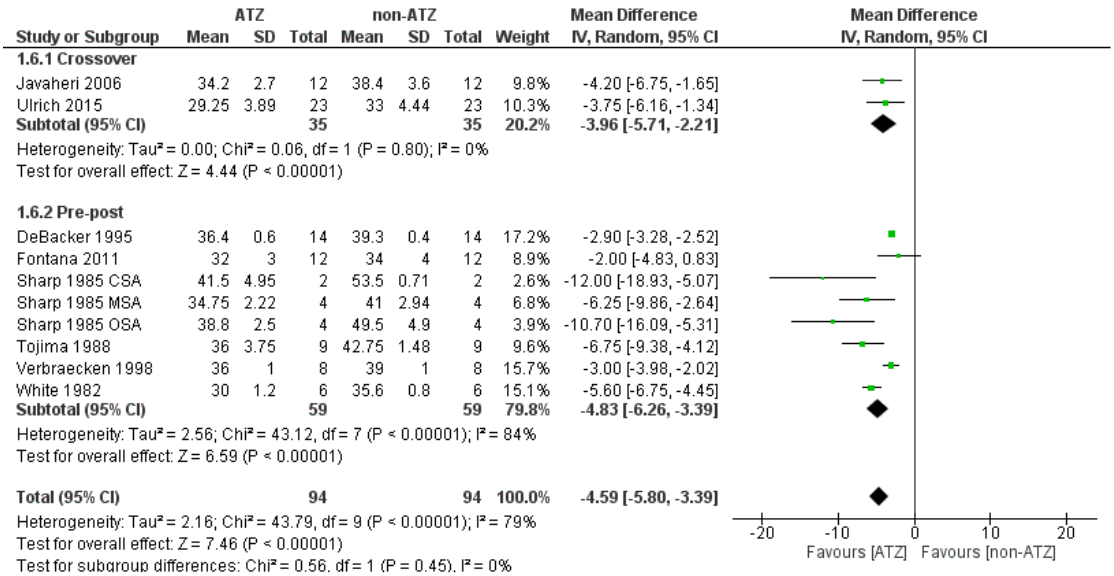


Figure S24 HCO^{-}

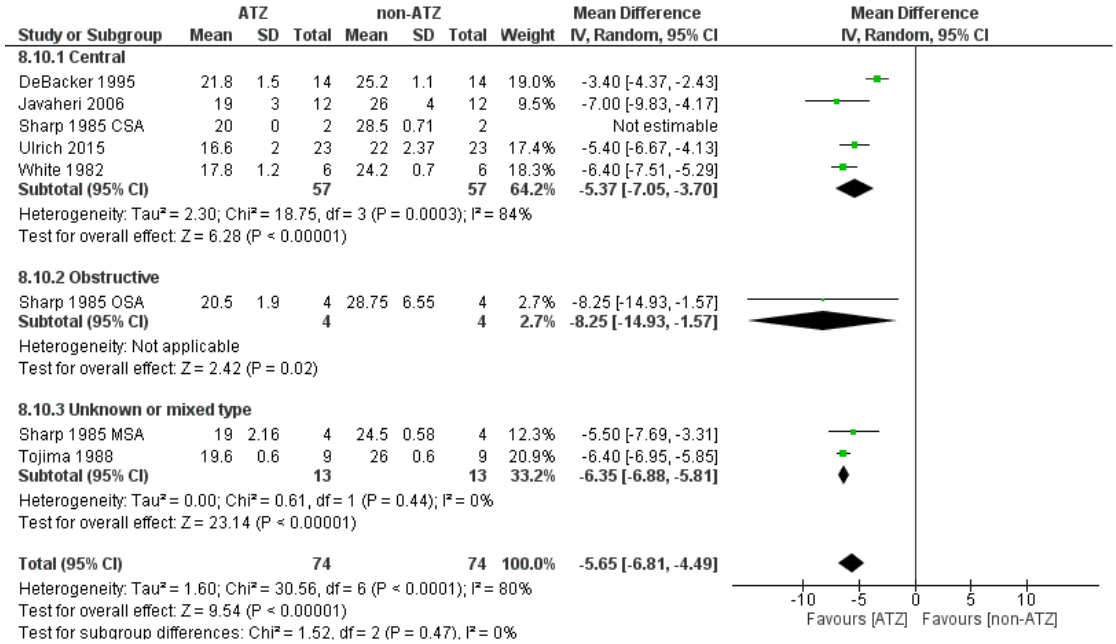
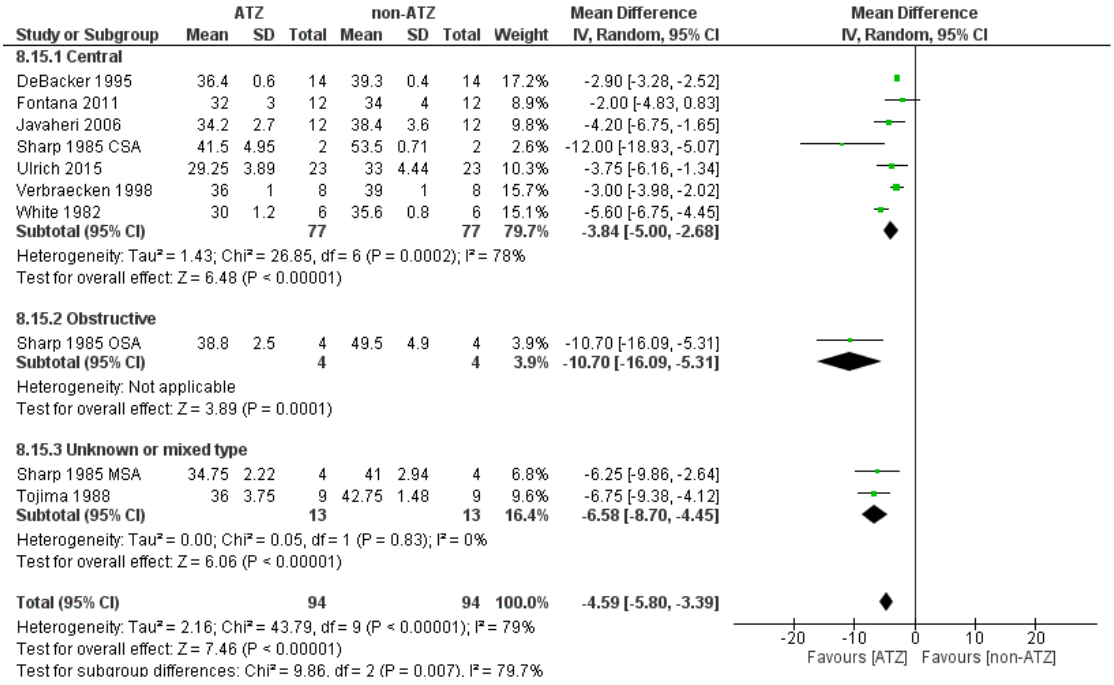



Figure S25 $PaCO_2$ divided by type of sleep apnea