

Supplemental Online Content

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eTable. Characteristics of SMART vs the Optimizing Cooling (OC) trial not in SMART

This supplemental material has been provided by the authors to give readers additional information about their work.

eTable. Characteristics of SMART vs the Optimizing Cooling trial (OC) not in SMART

2a. Maternal Characteristics	Enrolled infants in SMART (n=120)	Infants not enrolled in SMART (N=244)	Total Optimizing trial participants (n=364)	P-value
Race				
Black	27 (23%)	87 (36%)	114 (32%)	0.046
White	81 (69%)	138 (57%)	219 (61%)	
Other	9 (8%)	16 (7%)	25 (7%)	
Maternal age, Mean (SD), yr	28.4 ± 6.81	27.7 ± 6.81	27.9 ± 6.81	0.36
Married	62 (52%)	124 (51%)	186 (52%)	0.97
Gravida, median (IQR)	2 (1-3)	2 (1-3)	2 (1-3)	0.80 [†]
Parity, median (IQR)	1.5 (1-3)	1 (1-3)	1 (1-3)	0.18 [†]
Pregnancy complications				
Chronic hypertension	25 (21%)	48 (20%)	73 (20%)	0.78
Antepartum hemorrhage	13 (11%)	27 (11%)	40 (11%)	0.98
Thyroid dysfunction	5 (4%)	9 (4%)	14 (4%)	0.78*
Diabetes	12 (10%)	34 (14%)	46 (13%)	0.29
Intrapartum complications				
Fetal decelerations	95 (81%)	187 (77%)	282 (78%)	0.48
Cord problem	25 (21%)	24 (10%)	49 (13%)	0.004
Uterine rupture	6 (5%)	16 (7%)	22 (6%)	0.56
Maternal pyrexia (≥37.6C)	13 (11%)	28 (12%)	41 (11%)	0.87
Shoulder dystocia	11 (9%)	18 (7%)	29 (8%)	0.55
Maternal hemorrhage	17 (14%)	38 (16%)	55 (15%)	0.72
Rupture of membranes (≥ 18h)	12 (10%)	26 (11%)	38 (11%)	0.87
Emergency cesarean delivery	75 (63%)	156 (64%)	231 (63%)	0.79

2b. Neonatal Characteristics	SMART cohort (n=120)	Infants not enrolled in SMART (N=244)	Optimizing Cooling trial participants (n=364)	P value
Age at randomization, Mean (SD), h	4.94 ± 1.49	4.91 ± 1.09	4.92 ± 1.23	0.44
Outborn	78 (65%)	156 (64%)	234 (64%)	0.84
Male	70 (58%)	142 (58%)	212 (58%)	0.98
Apgar score ≤ 5				
5 minute	101 (86%)	205 (84%)	306 (85%)	0.76
10 minute	71 (68%)	152 (69%)	223 (69%)	0.88
Birthweight, Mean (SD), g	3384 ± 549	3347 ± 623	3359 ± 599	0.57
Length, Mean (SD), cm	50.8 ± 3.10	50.6 ± 2.98	50.7 ± 3.02	0.41

Head circumference, Mean (SD), cm	34.0 ± 1.97	34.2 ± 1.73	34.1 ± 1.81	0.96
Intubation in DR	88 (74%)	198 (81%)	286 (79%)	0.12
Continued resuscitation 10 mins	101 (85%)	214 (88%)	315 (87%)	0.40
Time to spontaneous respirations >10 mins	43 (39%)	107 (47%)	150 (44%)	0.17
Cord blood, Mean (SD)				
pH	6.95 ± 0.20	6.95 ± 0.18	6.95 ± 0.19	0.67
Base deficit	16.4 ± 7.07	15.9 ± 7.37	16.0 ± 7.27	0.63
Seizures	33 (28%)	72 (30%)	105 (29%)	0.69
Encephalopathy				0.04
Moderate	100 (83%)	180 (74%)	280 (77%)	
Severe	20 (17%)	64 (26%)	84 (23%)	
Inotropic support- prior to baseline	23 (19%)	56 (24%)	79 (22%)	0.36
Anticonvulsants- prior to baseline enrollment <6 hrs of birth	30 (26%)	55 (24%)	85 (24%)	0.63

2c. Hospital course	SMART (n=120)	Not in SMART (N=244)	Optimizing trial participants (n=364)	P value
During cooling				
Arrhythmia	1 (1%)	9 (4%)	10 (3%)	0.18*
Acidosis >3 hr	2 (2%)	5 (2%)	7 (2%)	1.00*
Major bleeding	2 (2%)	5 (2%)	7 (2%)	1.00*
Death during cooling	0 (0%)	13 (5%)	13 (4%)	0.006*
Skin changes	2 (2%)	14 (6%)	16 (4%)	0.07
Thrombosis	0 (0%)	1 (0%)	1 (0%)	1.00*
Other SAE	7 (6%)	25 (10%)	32 (9%)	0.16
During hospitalization				
Hypotension	33 (28%)	85 (35%)	118 (33%)	0.15
Inotropic support	50 (42%)	132 (54%)	182 (50%)	0.03
Blood transfusion	37 (31%)	85 (35%)	122 (34%)	0.45
Platelet transfusion	28 (23%)	80 (33%)	108 (30%)	0.06
PPHN	23 (19%)	84 (34%)	107 (29%)	0.003
Inhaled nitric oxide use	23 (19%)	82 (34%)	105 (29%)	0.004
ECMO	3 (3%)	19 (8%)	22 (6%)	0.047
Seizures	61 (53%)	125 (54%)	186 (54%)	0.82
Arrhythmia	1 (1%)	13 (5%)	14 (4%)	0.04*
Oliguria	30 (25%)	65 (27%)	95 (26%)	0.74
Hepatic dysfunction	18 (15%)	72 (30%)	90 (25%)	0.003

Infection	5 (4%)	8 (3%)	13 (4%)	0.77*
DIC	12 (10%)	42 (17%)	54 (15%)	0.07
Blood glucose <30 mg/dL	15 (13%)	35 (14%)	50 (14%)	0.63
Skin changes	3 (3%)	25 (10%)	28 (8%)	0.009
Days on oxygen, Mean (SD)	7.27 ± 8.00	8.90 ± 9.65	8.36 ± 9.16	0.14
Days on ventilator	5.58 ± 7.21	6.71 ± 7.89	6.34 ± 7.68	0.11
Gastrostomy	9 (8%)	15 (6%)	24 (7%)	0.63
Tracheostomy	0 (0%)	4 (2%)	4 (1%)	0.31*
Death during NICU stay	11 (9%)	38 (16%)	49 (13%)	0.09
Status at discharge	N=109	N=206	N=315	
Length of stay	21.1 ± 12.9	26.1 ± 32.6	24.3 ± 27.5	0.47
Home ventilation	0 (0%)	0 (0%)	0 (0%)	N/A
Home oxygen	5 (5%)	4 (2%)	9 (3%)	0.29*
Gavage tube	24 (22%)	36 (18%)	60 (19%)	0.35
Anticonvulsant medication after discharge	26 (24%)	45 (22%)	71 (23%)	0.72

P-values are from chi-square test or Kruskal-Wallis test unless otherwise noted. * Fisher's exact test due to sparse data. † P-values from Median test. no. (%), unless otherwise specified