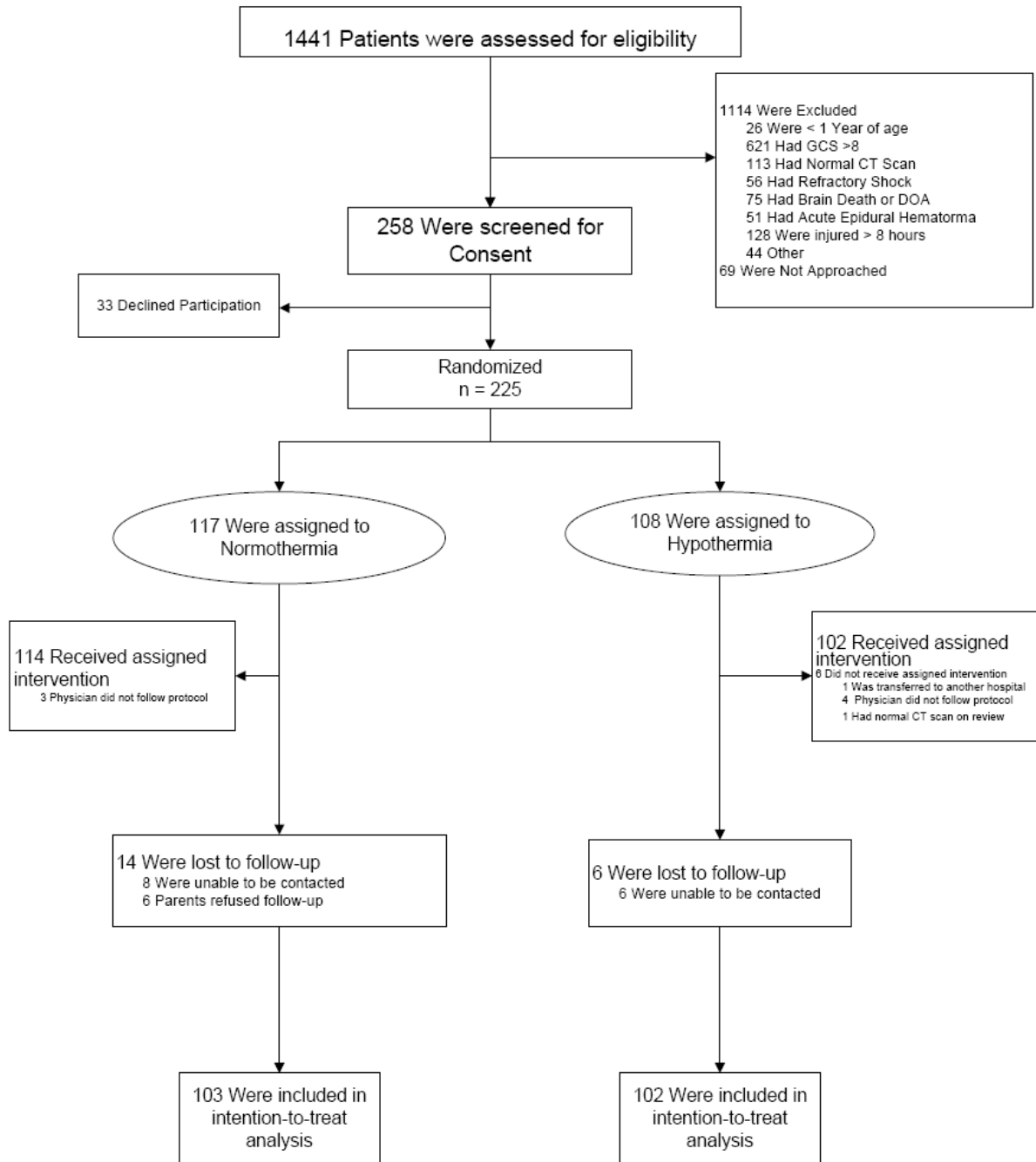


## Supplementary Appendix

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

Supplement to: Hutchison JS, Ward RE, Lacroix J, et al. Hypothermia therapy after traumatic brain injury in children. *N Engl J Med* 2008;358:2447-56.

Web Appendix Figure. **Enrolment and Outcomes**



Web appendix figure legend: Some patients had more than one exclusion criteria. Other exclusion criteria were high cervical spinal cord injury (n=16), severe developmental delay or persistent vegetative state prior to the injury (n=2), gunshot wound (n=3), pregnancy (n=1), unable to obtain consent (n=10) and not mechanically ventilated (n=12).

Web Appendix Table. Neuropsychological Outcomes

Time of follow-up	3 months					12 months				
	Hypothermia		Normothermia		P value	Hypothermia		Normothermia		P value
	N	Mean (SD)	N	Mean (SD)		N	Mean (SD)	N	Mean (SD)	
Intelligence Quotient	45	89 (16.4)	60	87 (16.5)	0.53	58	89.9 (19.3)	58	93.2 (16.8)	0.34
Memory										
General Memory Index	40	82.4 (20.8)	53	83.4 (24)	0.84	51	87.8 (26.5)	49	90.2 (27)	0.64
Long term visual memory	40	80.4 (29.5)	56	87.6 (22.7)	0.18	52	86.2 (28.5)	51	95.9 (21.8)	0.05
Long term verbal memory	40	73.4 (27.9)	56	82.1 (26.7)	0.13	51	77.6 (27.9)	52	85.3 (26.2)	0.15
Speed of processing	37	85.7 (22.8)	52	81.5 (23.8)	0.41	48	88.6 (25.6)	47	93.1 (20)	0.35
Executive function										
Behavioral Regulation Index	43	57 (15)	59	55.6 (13)	0.63	54	61.9 (18.7)	61	58.6 (13.7)	0.29
Meta-cognition Index	41	58.3 (12.1)	57	57.1 (11.8)	0.62	53	61.7 (13.7)	59	60 (13.3)	0.51

Web appendix table legend: Intelligence Quotients are Full Scale Intelligence Quotient scores collapsed across verbal and performance scales for pre-schoolers, school-aged children and adolescents (Wechsler Preschool and Primary Scale of Intelligence – Revised, Wechsler Intelligence Scale for Children – Third Edition and Wechsler Adult Intelligence Scale - Third Edition). The General Memory Index was collapsed across scores for children and adolescents (Childhood Memory Scale and Wechsler Memory Scale). The long term visual memory scores are Visual Delay Index scores collapsed across scores for children and adolescents (Childhood Memory Scale and Wechsler Memory Scale). The long term verbal memory scores are Verbal/Auditory Delay Index scores collapsed across children and adolescents (Verbal Delay for the Childhood Memory Scale and Auditory Delay for the Wechsler Memory Scale). The speed-of-processing scores were collapsed across children and adolescents (processing speed index from Wechsler Intelligence Scale for Children – Third Edition and Wechsler Adult Intelligence Scale - Third Edition). The executive function scores were obtained from parents or guardians using the Behavior Rating Inventory of Executive Function. Population norm values for intelligence quotient, memory scores and speed of processing are a mean of 100 and standard deviation of 15 with higher scores representing better performance. Population norm values for executive function are a mean of 50 and a standard deviation of 10 with higher scores representing greater impairment.