Supplementary Online Content

Askie LM, Darlow BA, Finer N, et al; for the Neonatal Oxygenation Prospective Meta-analysis (NeOProM) Collaboration. Association between oxygen saturation targeting and death or disability in extremely preterm infants in the neonatal oxygenation prospective meta-analysis collaboration. *JAMA*. doi:10.1001/jama.2018.5725

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

NeOProM variables collected and outcome definitions

Baseline characteristics

- Trial numbers
- Gender: male / female
- Gestational age at birth (weeks)
- Birthweight (g)
- Small for gestational age (trialist defined): no / yes
- Small for gestational age (NeOProM defined): no / yes. Less than 10th percentile using charts from Kramer et al.[1]
- Multiple birth: no / yes
- Inborn: no / yes
- Admission temperature (Celsius)
- Apgar score at 5 minutes after birth
- Inspired oxygen concentration immediately prior to randomisation (%)
- Use of antenatal corticosteroids: no / yes (partial course) / yes (full course)
- Mode of delivery: vaginal – normal / vaginal – instrumental / Caesarean
- Respiratory support before randomization: positive airway pressure with endotracheal tube / positive airway pressure without endotracheal tube / supplemental oxygen without airway positive airway pressure / no respiratory support

Primary outcome

* Analyses adjusted for trials and multiple births

- **Death or major disability by 18-24 months' age, corrected for prematurity: Primary analysis (using Bayley-III cognitive and/or language<85 only).**
  Primary outcome as pre-specified in published NeOProM protocol: composite outcome of death or major disability by 18-24 months' age, corrected for prematurity. Major disability is any of the following: Bayley-III Developmental Assessment cognitive score <85 and/or language score <85; severe visual loss; cerebral palsy with GMFCS level 2 or higher at 18-24 months' age, corrected for prematurity; or deafness requiring hearing aids.
- **Death or major disability by 18-24 months' age, corrected for prematurity: Supportive analysis (using alternative cognitive function measures where B-III is unavailable).**
  Supportive analysis of primary outcome: including using alternative sources of information for classifying major disability as used within individual trials. This may have included a Bayley-II MDI score <70, or another validated assessment tool (e.g. Griffiths test), or a paediatrician assessment, or parent-reported measure of neurodevelopmental impairment (e.g. able to speak less than 5-10 words) or other measures.
- **Death or major disability by 18-24 months' age, corrected for prematurity: Secondary analysis (using Bayley-III cognitive and/or language<70 only).**
  Secondary analysis: composite outcome of death or major disability by 18-24 months' age, corrected for prematurity. Major disability is any of the following: Bayley-III Developmental Assessment cognitive score <70 and/or language score <70; severe visual loss; cerebral palsy with GMFCS level 2 or higher at 18-24 months' age, corrected for prematurity; or deafness requiring hearing aids.
- **Death or major disability by 18-24 months' age, corrected for prematurity: Trialist definition.**
  Trialist defined analysis: primary outcome as defined by trialists - includes alternative measures of disability as described in 'supportive analysis of primary outcome'.

Secondary outcomes

* Analyses adjusted for trials and multiple births

Major disability by 18-24 months' age, corrected for prematurity

- **Major disability by 18-24 months' age, corrected for prematurity: Primary Analysis**
  Major disability by 18-24 months' age, corrected for prematurity. Major disability is any of the following: Bayley-III Developmental Assessment cognitive score <85 and/or language score <85; severe visual loss; cerebral palsy with GMFCS level 2 or higher at 18-24 months'age, corrected for prematurity; or deafness requiring hearing aids.
- **Major disability by 18-24 months' age, corrected for prematurity: Supportive analysis of primary outcome**
  Including using alternative sources of information for classifying major disability as used within individual trials. This may have included a Bayley-II MDI score <70, or another validated assessment tool (e.g. Griffiths test), or a paediatrician assessment, or parent-reported measure of neurodevelopmental impairment (e.g. able to speak less than 5-10 words) or other measures.
- **Major disability by 18-24 months' age, corrected for prematurity: Secondary Analysis**
  Major disability by 18-24 months' age, corrected for prematurity. Major disability is any of the following: Bayley-III Developmental Assessment cognitive score <70 and/or language score <70; severe visual loss; cerebral palsy with GMFCS level 2 or higher at 18-24 months' age, corrected for prematurity; or deafness requiring hearing aids.
- **Major disability by 18-24 months' age, corrected for prematurity: Trialist definition**
  Major disability defined by trialists - includes alternative measures of disability as described in 'supportive analysis of primary outcome'
- Cerebral Palsy with GMFCS ≥ 2. Includes infants with cerebral palsy diagnosis but GMFCS was unknown
- Severe visual impairment as defined by trialists
- Deafness requiring hearing aids or worse

Death

- Death prior to 18-24 months' age, corrected for prematurity
- Death prior to 36 weeks' postmenstrual age
- Death prior to discharge from hospital

Overall survival

- Overall survival. Hazard ratio stratified by trial.

Bayley-III scores at 18-24 months' age, corrected for prematurity

- Bayley-III cognitive score and/or language score <85 at 18-24 months'age, corrected for prematurity
- Bayley-III cognitive score <85 at 18-24 months' age, corrected for prematurity
- Bayley-III language score <85 at 18-24 months' age, corrected for prematurity
- Bayley-III cognitive score and/or language score <70 at 18-24 months' age, corrected for prematurity
- Bayley-III cognitive score <70 at 18-24 months' age, corrected for prematurity
- Bayley-III language score <70 at 18-24 months' age, corrected for prematurity
- Quantitative Bayley-III scores: Cognitive composite
  Excludes infants where values of Bayley-III were imputed for infants who had unsuccessful Bayley-III assessments due to severe developmental delay or autism
- Quantitative Bayley-III scores**:** Language composite
  Excludes infants where values of Bayley-III were imputed for infants who had unsuccessful Bayley-III assessments due to severe developmental delay or autism

- Quantitative Bayley-III scores**:** Language: Receptive communication
  Excludes infants where values of Bayley-III were imputed for infants who had unsuccessful Bayley-III assessments due to severe developmental delay or autism
- Quantitative Bayley-III scores**:** Language: Expressive communication
  Excludes infants where values of Bayley-III were imputed for infants who had unsuccessful Bayley-III assessments due to severe developmental delay or autism

PDA, severe NEC and treated ROP

- Patent ductus arteriosus (PDA) diagnosed by ultrasound and receiving medical or surgical treatment. Not necessarily diagnosed by ultrasound for SUPPORT, BOOST-NZ, BOOST-II UK, BOOST-II AUS.
- Patent ductus arteriosus (PDA) receiving surgical treatment
- Necrotizing enterocolitis (NEC) receiving surgery or leading to death. NEC receiving surgery only for COT.
- Retinopathy of prematurity (ROP) treatment by laser photocoagulation or cryotherapy or anti-VEGF injection (one or both eyes)

Respiratory support

- Positive airway pressure with endotracheal tube at 36 weeks' postmenstrual age
- Positive airway pressure without endotracheal tube at 36 weeks' postmenstrual age
- Supplemental oxygen without positive airway pressure at 36 weeks' postmenstrual age: SUPPORT and UK trials used a physiologic test to determine need for supplemental oxygen whilst the other trials did not
- Discharged home on any supplemental oxygen therapy: yes/no
- Postmenstrual age (weeks) infant ceased use of positive airway pressure with endotracheal tube: not available for SUPPORT or BOOST-II UK
- Postmenstrual age (weeks) infant ceased use of positive airway pressure without endotracheal tube: not available for SUPPORT or BOOST-II UK
- Postmenstrual age (weeks) infant ceased use of supplemental oxygen without airway pressure: not available for SUPPORT

Re-admission to hospital

- One or more re-admissions to hospital by 18-24 months' age, corrected for prematurity

Subgroup variables

- Gestational Age: <26 weeks / ≥26 weeks
- Inborn / Outborn
- Mode of Delivery: vaginal / Caesarean
- Use of Antenatal Corticosteroids: no / yes
- Gender: male / female
- Multiple birth: no / yes
- Time of Intervention Commencement: <6 hours / ≥6 hours
- Oximeter Software Type: original / revised / mixed
- Small for gestational age (trialist defined): no / yes. Using trial-specific SGA definitions.
- Small for gestational age (NeOProM defined): no / yes. Less than 10th percentile using charts from Kramer et al.[1]

eTable 1. Characteristics of randomized trials included in the NeOProM Collaboration

Acronym	NeOProM[2]	BOOST-II Australia[3]	BOOST-II UK[4]	BOOST-NZ[5]	SUPPORT[6]	COT[7]
Characteristics of randomized trials included in the NeOProM Collaboration						
Registration number	NCT01124331	ACTRN12605000055606	ISRCTN00842661	ACTRN12605000253606	NCT00233324	ISRCTN62491227
Funding	Supported by the NHMRC Clinical Trials Centre, University of Sydney, Australia; and by a grant (R03HD 079867) from the Eunice Kennedy Shriver National Institute of Child Health and Human Development National Institutes of Health, USA	Funded by the Australian National Health and Medical Research Council.	Funded by the UK Medical Research Council and managed by the UK National Institute for Health Research.	Funded by New Zealand Heath Research Council and the Child Health Research Foundation (Cure Kids).	Funded by the USA Eunice Kennedy Shriver National Institute of Child Health and Human Development; the National Heart, Lung and Blood Institute; and the National Institutes of Health.	Funded by Canadian Institutes of Health Research.
Planned sample size	5230	1200	1200	320	1310	1200
Actual sample size	4965	1135	973	340	1316	1201
Countries of recruitment		Australia	United Kingdom	New Zealand	United States of America	Canada, USA, Argentina, Germany, Israel, Finland
Enrolment and follow-up periods		Enrolment was undertaken from March 2006 until December 2010. Follow-up assessments began in August 2008 and ended in August 2013.	Enrolment was undertaken from September 2007 until December 2010. Follow-up assessments began in December 2009 and ended in August 2014.	Enrolment was undertaken from September 2006 until December 2009. Follow-up assessments began in March 2009 and ended in June 2012.	Enrolment was undertaken from February 2005 until February 2009. Follow-up assessments began in November 2006 and ended in July 2011.	Enrolment was undertaken from December 2006 until August 2010. Follow-up assessments began in October 2008 and ended in August 2012.
Study design	Prospectively planned individual participant data meta-analysis	Randomized multicenter trial	Randomized multicenter trial	Randomized multicenter trial	Randomized multicenter trial with a 2-by-2 factorial design	Randomized multicenter trial
How were multiple births randomized?		Siblings within multiple births were randomised individually.	Siblings within multiple births were randomised individually.	Siblings within multiple births were randomised individually.	Multiple births were randomised to the same group.	Siblings within multiple births were randomised individually.

eTable 1. Characteristics of randomized trials included in the NeOProM Collaboration (continued)

Acronym	NeOProM[2]	BOOST-II Australia[3]	BOOST-II UK[4]	BOOST-NZ[5]	SUPPORT[6]	COT[7]
Participants		Infants < 28 wks gestation inborn or outborn < 24 hrs old	Infants < 28 wks gestation < 12 hrs old (24 hrs if outborn)	Infants < 28 wks gestation inborn or outborn < 24 hrs old	Infants 24-27 wks gestation, < 2 hrs old	Infants 23 0/7-27 6/7 wks gestation < 24 hrs old
Blinded?		Yes	Yes	Yes	Yes	Yes
Intervention		Lower oxygen saturation target (85%-89%)	Lower oxygen saturation target (85%-89%)	Lower oxygen saturation target (85%-89%)	Lower oxygen saturation target (85%-89%)	Lower oxygen saturation target (85%-89%)
Comparator		Higher oxygen saturation target (91%-95%)	Higher oxygen saturation target (91%-95%)	Higher oxygen saturation target (91%-95%)	Higher oxygen saturation target (91%-95%)	Higher oxygen saturation target (91%-95%)
Intervention & comparator duration		Oximeter applied after randomisation, asap after admission to NICU, continued for minimum 2 wks. Thereafter continued until 36 wks pma or SpO_2 > 96% in room air for 95% of time over 3 days.	Oximeter applied from randomisation until postmenstrual age (pma) of 36 wks or until baby was breathing air. All monitoring at any time prior to 36 wks pma was done using study oximeter. BPD defined at 36 wks using a physiological oxygen test.	Oximeter applied asap after admission to NICU, continued for minimum 2 wks. Thereafter continued until 36 wks pma or SpO_2 > 96% in room air for 95% of time over 3 days.	Oximeter applied within 2 hrs following admission to NICU until infant has been in room air for 72 hrs or until 36 wks pma age, assessed by physiologic oxygen test.	Oximeter applied from day of birth until a min 36 wks pma. If breathing room air without any form of respiratory assistance from 35 wks pma onward, study oximetry discontinued at 36 wks pma. If receiving any form of respiratory assistance &/or oxygen therapy from 35 wks pma onward study oximetry continued until 40 wks pma. Study oximetry stopped at any time before 40 wks pma if baby discharged home (with or without respiratory assistance &/or oxygen).

eTable 1. Characteristics of randomized trials included in the NeOProM Collaboration (continued)

Acronym	NeOProM[2]	BOOST-II Australia[3]	BOOST-II UK[4]	BOOST-NZ[5]	SUPPORT[6]	COT[7]
Primary outcome of death or major disability at 18-24 months corrected age as defined by each trial and NeOProM Collaboration						
Primary outcome(s)	Death or major disability by 18-24 months corrected for prematurity. Major disability is any of the following: * BSID-3 Developmental Assessment cognitive score <85 and/or language score <85 * severe visual loss * cerebral palsy with GMFCS level 2 or higher at 18-24 months postmenstrual age * deafness requiring hearing aids	Death or survival with major disability at 2 yrs corrected for prematurity. Major disability defined as having any of the following: * cognitive or language score <85 on BSID-3 * severe visual loss * cerebral palsy with inability to walk at 2 yrs * deafness requiring hearing aids	Death or survival with major disability at 2 yrs corrected for prematurity. Major disability defined as having any of the following: * cognitive or language score <85 on BSID-3 * severe visual loss * cerebral palsy with inability to walk at 2 yrs * deafness requiring (or too severe to benefit from) hearing aids	Death or survival with major disability at 2 yrs corrected for prematurity. Major disability defined as having any of the following: * composite cognitive language score Bayley-III<85 or MDI<70 on the Bayley-II assessment. * severe visual loss * cerebral palsy defined as GMFCS level 2 or higher * deafness requiring hearing aids	1. Death or survival with neurodevelopmental impairment (defined as either cognitive score on BSID-3 <70, GMFCS level 2 or higher, moderate to severe CP, hearing impairment or bilateral visual impairment) at 18-22 months corrected for prematurity. 2. Survival without severe ROP (threshold ROP and/or the need for surgical intervention).	Death or survival with major disability at 18-21 months corrected for prematurity. Major disability defined as having any of the following: * cognitive score <85 and/or language score <85 on BSID-3 * severe visual loss * gross motor disability with a GMFCS level 2 or higher * deafness requiring hearing aids
Death	At 18-24 months corrected for prematurity	At 24 months corrected for prematurity	At 24 months corrected for prematurity	At 24 months corrected for prematurity	At 24 months corrected for prematurity	At 18 months corrected for prematurity
Cognitive or language delay	Composite cognitive or language score <85 on Bayley-III	Composite cognitive language score Bayley-III<85 or MDI<70 on the Bayley-II assessment. If Bayley-III or Bayley-II are missing the final criterion were replaced by any one of the following: uses <10 words; or language problems	Combined language or cognitive score of <85 using Bayley-III. Alternative measures were used in some cases including WPPSI-III, Denver Developmental Screening Test, Griffiths Mental Development Scales, Schedule of	Composite cognitive language score Bayley-III<85 or MDI<70 on the Bayley-II assessment. If Bayley-III or Bayley-II are missing the final criterion were replaced by any one of the following: uses <10 words; or language problems	Cognitive composite score on Bayley-III<70.	Composite cognitive and/or language score <85 on Bayley-III.

eTable 1. Characteristics of randomized trials included in the NeOProM Collaboration (continued)

Acronym	NeOProM[2]	BOOST-II Australia[3]	BOOST-II UK[4]	BOOST-NZ[5]	SUPPORT[6]	COT[7]
		indicated on the short health assessment, delayed development by >12 months, other severe impairment.	Growing Skills (SGS), PARCA-R, use of fewer than 5 words, or assessed by paediatrician or GP to have more than 6 mths developmental delay by 24 months corrected for prematurity. Information from health professionals/ parents was assessed independently by 2 assessors masked to group assignment to adjudicate cognitive outcome in a small number of cases.	indicated on the short health assessment, delayed development by >12 months, other severe impairment.		
Gross motor disability	GMFCS level 2 or higher	GMFCS level 2 or higher, as indicated on the health status or short health status assessments	Severe cerebral palsy (unable to walk without help at 2 years)	GMFCS level 2 or higher, as indicated on the health status or short health status assessments	Moderate to severe cerebral palsy defined as a non-progressive disorder with abnormal muscle tone in at least one arm or leg that was associated with abnormal control of movement or posture and a GMFCS score of 2 or higher	Level 2 or higher according to GMFCS. Normal level is assigned if a child can walk 10 steps independently at 18 months

eTable 1. Characteristics of randomized trials included in the NeOProM Collaboration (continued)

Acronym	NeOProM[2]	BOOST-II Australia[3]	BOOST-II UK[4]	BOOST-NZ[5]	SUPPORT[6]	COT[7]
Severe hearing loss	Deafness requiring hearing aids	Requiring hearing aids, as indicated on the health status or short health status assessments	Deafness requiring (or too severe to benefit from) a hearing aid	Requiring hearing aids, as indicated on the health status or short health status assessments	The inability to understand oral directions of the examiner and to communicate, with or without hearing amplification	Prescribed hearing aids or cochlear implants
Severe visual impairment	Severe visual impairment as defined by trialists	Legal blindness, as indicated on the health status or short health status assessments	Severe visual loss certifiable as legally blind or partially sighted	Legal blindness, as indicated on the health status or short health status assessments	Vision worse than 20/200	Corrected visual acuity <20/200 in the better eye
Secondary outcomes as defined by each trial and the NeOProM Collaboration						
Measures of respiratory support	Supplemental oxygen requirement at 36 postmenstrual age; postmenstrual age ceased endotracheal intubation, continuous positive airway pressure (CPAP), supplemental oxygen, and home oxygen (if received)	Stop date recorded when used for ≥30 minutes for endotracheal intubation, CPAP and supplemental oxygen. Last date of home oxygen use recorded.	Stop date not collected for endotracheal intubation or CPAP. Last date of home oxygen use recorded.	Last date recorded when used for ≥30 minutes for endotracheal intubation, CPAP and supplemental oxygen. Last date of home oxygen use recorded.	Stop date not collected for endotracheal intubation, CPAP or supplemental oxygen use past 36 weeks postmenstrual age.	Final stop date recorded for endotracheal intubation, CPAP and supplemental oxygen including use of supplemental oxygen or positive airway pressure at home.
PDA diagnosed by ultrasound and receiving any treatment	PDA diagnosed by ultrasound and receiving any treatment	PDA diagnosed by ultrasound	PDA diagnosed, but not necessarily by ultrasound	PDA diagnosed by ultrasound	PDA diagnosed, but not necessarily by ultrasound	Any diagnosis of PDA receiving therapy
PDA receiving surgical treatment	PDA diagnosed by ultrasound and receiving surgical treatment	PDA requiring surgical ligation	PDA requiring surgery	PDA requiring surgical ligation	PDA requiring surgery	PDA requiring surgical ligation

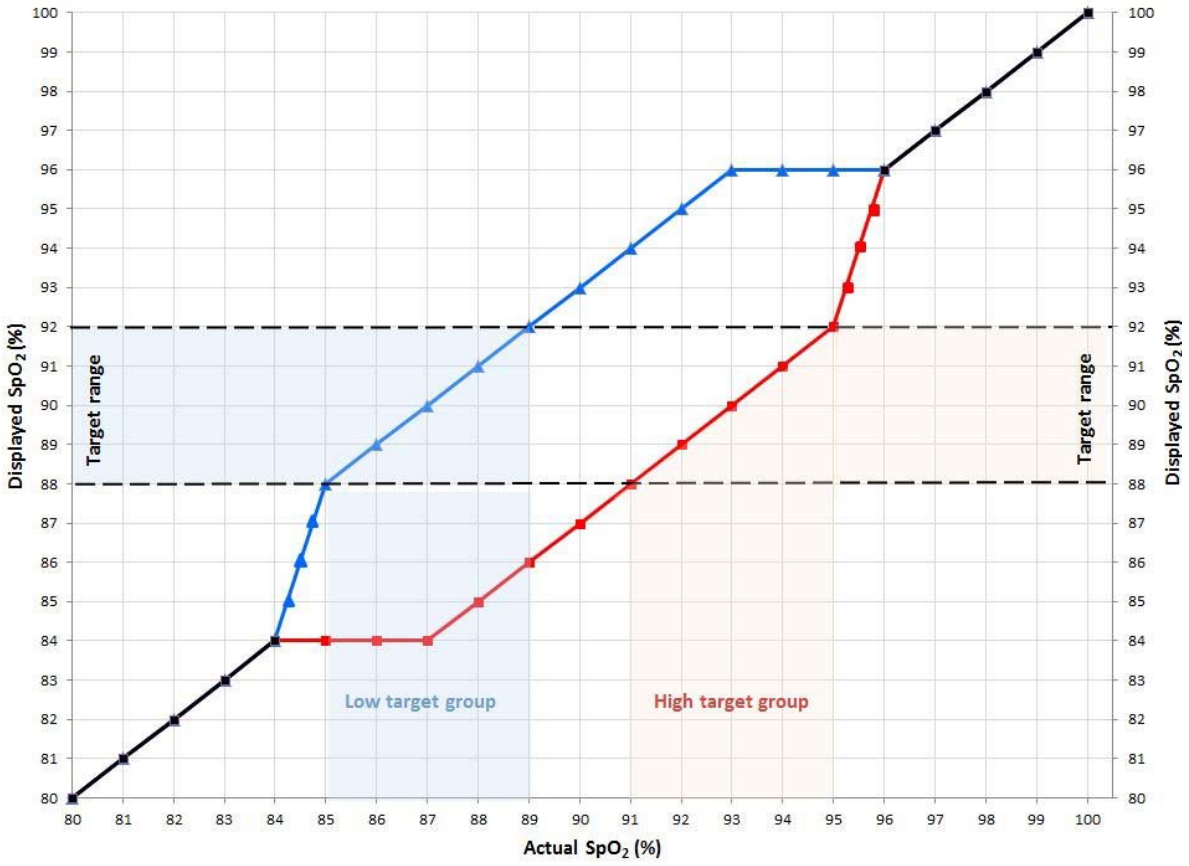
eTable 1. Characteristics of randomized trials included in the NeOProM Collaboration (continued)

Acronym	NeOProM[2]	BOOST-II Australia[3]	BOOST-II UK[4]	BOOST-NZ[5]	SUPPORT[6]	COT[7]
NEC requiring surgery or leading to death	NEC requiring surgery or leading to death	NEC requiring surgery or leading to death	NEC requiring surgery or leading to death	NEC requiring surgery or leading to death	Modified Bell's stage ≥2 on a scale ranging from 1-3	Diagnosed during surgery or by a finding of pneumatosis intestinalis, hepatobiliary gas or free intraperitoneal air on XR
Cerebral palsy	Cerebral palsy with GMFCS level 2 or higher or MACS level 2 or higher at 18-24 months corrected for prematurity	Cerebral palsy with GMFCS score ≥ level 2	Unable to walk without help at 2 years (MACS level 1 or higher) and/or GMFCS score ≥ level 2	Cerebral palsy with GMFCS score ≥ level 2	Moderate to severe cerebral palsy defined as a non-progressive disorder with abnormal muscle tone in at least one arm or leg that was associated with abnormal control of movement or posture and a GMFCS score ≥ 2	Level 2 or higher according to GMFCS. Normal level is assigned if a child can walk 10 steps independently at 18 months
Re-admissions to hospital	One or more re-admissions to hospital up to 18-24 months corrected for prematurity	Re-admissions to hospital at 2 years corrected for prematurity	Re-admissions to hospital until 2 years after delivery was due (and cause)	Re-admissions to hospital at 2 years corrected for prematurity	Re-admissions to hospital at 2 years corrected for prematurity	Re-admission to hospital – available for children whose family provided a standardised medical history at 18 months

Abbreviations

NeOProM: Neonatal Oxygenation Prospective Meta-analysis; BOOST: Benefits of Oxygen Saturation Targeting; UK: United Kingdom; NZ: New Zealand; SUPPORT: Surfactant Positive Airway Pressure and Pulse Oximetry Trial; COT: Canadian Oxygen Trial; NHMRC: National Health and Medical Research Council; USA: United States of America; wks: weeks; hrs: hours; NICU: Neonatal intensive care unit; pma: postmenstrual age; SpO_2: blood oxygen saturation level; BPD: bronchopulmonary dysplasia; asap: as soon as possible; min: minimum; BSID: Bayley Scales of Infant Development; GMFCS: Gross Motor Function Classification System; yrs: years; CP: cerebral palsy; ROP: retinopathy of prematurity; MDI: Mental Developmental Index; WPPSI: Wechsler Preschool and Primary Scale of Intelligence; SGS: Schedule of Growing Skills; PARCA-R: Parent Report of Children's Abilities-Revised; GP: General Practitioner; mths: months; CPAP: continuous positive airway pressure; PDA: patent ductus arteriosus; NEC: necrotizing enterocolitis; XR: x-ray; MACS: Manual Ability Classification System.

eFigure 1. Oximeter adjustment to maintain treatment allocation blinding



Abbreviations

SpO_2: blood oxygen saturation level

eTable 2. Overall survival analysis

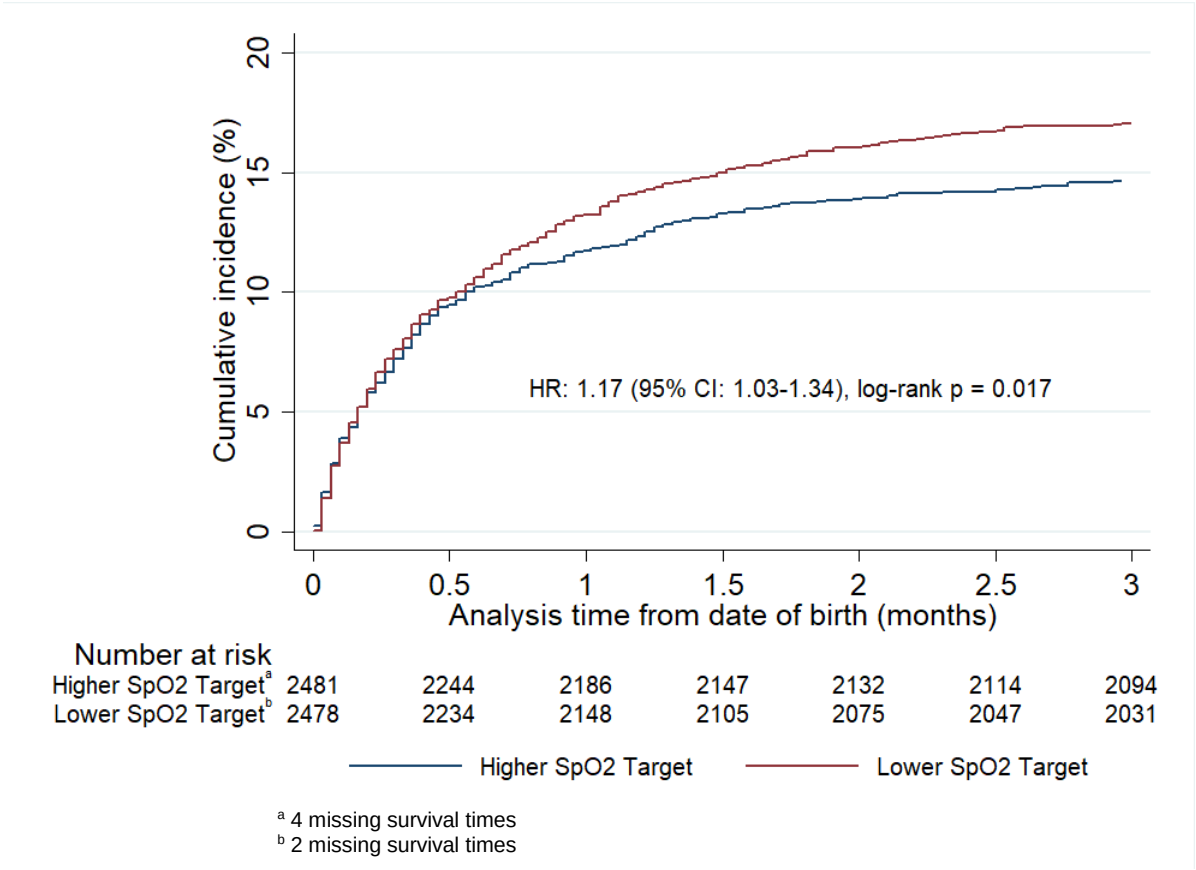
		Higher SpO_2 target	Lower SpO_2 target	Hazard Ratio* (95% CI)	P-value
Death	SUPPORT	118/662	140/654	1.23 (0.96-1.57)	0.098
	COT	88/599	97/602	1.10 (0.82-1.46)	0.528
	BOOST-NZ	27/170	25/170	0.91 (0.53-1.57)	0.737
	BOOST-II UK	98/487	122/486	1.26 (0.97-1.64)	0.089
	BOOST-II AUS	87/567	100/568	1.16 (0.87-1.54)	0.325
	NeOProM	**418/2485**	**484/2480**	**1.17 (1.03-1.34)**	**0.017**

Abbreviations

SUPPORT: Surfactant Positive Airway Pressure and Pulse Oximetry Trial; COT: Canadian Oxygen Trial; BOOST: Benefits of Oxygen Saturation Targeting; NZ: New Zealand; UK: United Kingdom; AUS: Australia; NeOProM: Neonatal Oxygenation Prospective Meta-analysis.

*Hazard ratio (HR) stratified by trial. HR greater than 1 favors the higher SpO_2 target range.

eFigure 2. Cumulative incidence curve of death by treatment group to 3 months age



[a] 4 missing survival times
[b] 2 missing survival times

Abbreviations

HR: hazard ratio; CI: confidence interval. HR greater than 1 favors the higher SpO_2 target range.

Pre-specified subgroup analyses

eTable 3. Subgroup numbers by trial

			Lower oxygen saturation target N(%)	Higher oxygen saturation target N(%)	Total N(%)
Gestational Age (<26 weeks vs ≥26 weeks)	SUPPORT	<26 weeks	276 (42.2)	289 (43.7)	565 (42.9)
		≥26 weeks	378 (57.8)	373 (56.3)	751 (57.1)
	COT	<26 weeks	260 (43.2)	252 (42.1)	512 (42.6)
		≥26 weeks	342 (56.8)	347 (57.9)	689 (57.4)
	BOOST-NZ	<26 weeks	72 (42.4)	72 (42.4)	144 (42.4)
		≥26 weeks	98 (57.6)	98 (57.6)	196 (57.6)
	BOOST-II UK	<26 weeks	214 (44.0)	217 (44.6)	431 (44.3)
		≥26 weeks	272 (56.0)	270 (55.4)	542 (55.7)
	BOOST-II AUS	<26 weeks	241 (42.4)	240 (42.3)	481 (42.4)
		≥26 weeks	327 (57.6)	327 (57.7)	654 (57.6)
	NeOProM	**<26 weeks**	**1063 (42.9)**	**1070 (43.1)**	**2133 (43.0)**
		≥26 weeks	**1417 (57.1)**	**1415 (56.9)**	**2832 (57.0)**
Inborn vs Outborn[a]	SUPPORT	Inborn	654 (100.0)	662 (100.0)	1316 (100.0)
		Outborn	0 (0.0)	0 (0.0)	0 (0.0)
	COT	Inborn	562 (93.4)	543 (90.7)	1105 (92.0)
		Outborn	40 (6.6)	56 (9.3)	96 (8.0)
	BOOST-NZ	Inborn	159 (93.5)	157 (92.4)	316 (92.9)
		Outborn	11 (6.5)	13 (7.6)	24 (7.1)
	BOOST-II UK	Inborn	428 (88.2)	426 (87.7)	854 (88.0)
		Outborn	57 (11.8)	60 (12.3)	117 (12.0)
	BOOST-II AUS	Inborn	524 (92.3)	525 (92.6)	1049 (92.4)
		Outborn	44 (7.7)	42 (7.4)	86 (7.6)
	NeOProM	**Inborn**	**2327 (93.9)**	**2313 (93.1)**	**4640 (93.5)**
		Outborn	**152 (6.1)**	**171 (6.9)**	**323 (6.5)**

eTable 3. Subgroup numbers by trial (continued)

			Lower oxygen saturation target N(%)	Higher oxygen saturation target N(%)	Total N(%)
Mode of Delivery	SUPPORT	Vaginal	213 (32.6)	220 (33.2)	433 (32.9)
		Caesarean	441 (67.4)	442 (66.8)	883 (67.1)
	COT	Vaginal	222 (37.1)	243 (40.6)	465 (38.8)
		Caesarean	377 (62.9)	355 (59.4)	732 (61.2)
	BOOST-NZ	Vaginal	75 (44.1)	79 (46.5)	154 (45.3)
		Caesarean	95 (55.9)	91 (53.5)	186 (54.7)
	BOOST-II UK	Vaginal	292 (60.2)	301 (61.9)	593 (61.1)
		Caesarean	193 (39.8)	185 (38.1)	378 (38.9)
	BOOST-II AUS	Vaginal	272 (48.1)	257 (45.6)	529 (46.9)
		Caesarean	294 (51.9)	306 (54.4)	600 (53.1)
	NeOProM	**Vaginal**	**1074 (43.4)**	**1100 (44.4)**	**2174 (43.9)**
		Caesarean	**1400 (56.6)**	**1379 (55.6)**	**2779 (56.1)**
Use of Antenatal Corticosteroids	SUPPORT	No	21 (3.2)	29 (4.4)	50 (3.8)
		Yes	633 (96.8)	632 (95.6)	1265 (96.2)
	COT	No	70 (11.7)	61 (10.2)	131 (10.9)
		Yes	530 (88.3)	536 (89.8)	1066 (89.1)
	BOOST-NZ	No	20 (11.8)	18 (10.6)	38 (11.2)
		Yes	150 (88.2)	152 (89.4)	302 (88.8)
	BOOST-II UK	No	40 (8.3)	48 (9.9)	88 (9.1)
		Yes	443 (91.7)	436 (90.1)	879 (90.9)
	BOOST-II AUS	No	64 (11.3)	42 (7.5)	106 (9.4)
		Yes	501 (88.7)	519 (92.5)	1020 (90.6)
	NeOProM	**No**	**215 (8.7)**	**198 (8.0)**	**413 (8.4)**
		Yes	**2257 (91.3)**	**2275 (92.0)**	**4532 (91.6)**
Gender	SUPPORT	Male	341 (52.1)	371 (56.0)	712 (54.1)
		Female	313 (47.9)	291 (44.0)	604 (45.9)
	COT	Male	329 (54.7)	326 (54.4)	655 (54.5)
		Female	273 (45.3)	273 (45.6)	546 (45.5)
	BOOST-NZ	Male	90 (52.9)	90 (52.9)	180 (52.9)
		Female	80 (47.1)	80 (47.1)	160 (47.1)

eTable 3. Subgroup numbers by trial (continued)

			Lower oxygen saturation target N(%)	Higher oxygen saturation target N(%)	Total N(%)
	BOOST-II UK	Male	258 (53.1)	259 (53.2)	517 (53.1)
		Female	228 (46.9)	228 (46.8)	456 (46.9)
	BOOST-II AUS	Male	293 (51.6)	296 (52.2)	589 (51.9)
		Female	275 (48.4)	271 (47.8)	546 (48.1)
	NeOProM	**Male**	**1311 (52.9)**	**1342 (54.0)**	**2653 (53.4)**
		Female	**1169 (47.1)**	**1143 (46.0)**	**2312 (46.6)**
Multiple Birth	SUPPORT	No	493 (75.4)	486 (73.4)	979 (74.4)
		Yes	161 (24.6)	176 (26.6)	337 (25.6)
	COT	No	396 (65.8)	417 (69.6)	813 (67.7)
		Yes	206 (34.2)	182 (30.4)	388 (32.3)
	BOOST-NZ	No	124 (72.9)	124 (72.9)	248 (72.9)
		Yes	46 (27.1)	46 (27.1)	92 (27.1)
	BOOST-II UK	No	347 (71.5)	350 (72.0)	697 (71.8)
		Yes	138 (28.5)	136 (28.0)	274 (28.2)
	BOOST-II AUS	No	430 (75.7)	432 (76.2)	862 (75.9)
		Yes	138 (24.3)	135 (23.8)	273 (24.1)
	NeOProM	**No**	**1790 (72.2)**	**1809 (72.8)**	**3599 (72.5)**
		Yes	**689 (27.8)**	**675 (27.2)**	**1364 (27.5)**
Time of Intervention Commencement	SUPPORT	<6 hours	638 (99.2)	645 (99.2)	1283 (99.2)
		≥6 hours	5 (0.8)	5 (0.8)	10 (0.8)
	COT	<6 hours	27 (4.5)	26 (4.3)	53 (4.4)
		≥6 hours	575 (95.5)	573 (95.7)	1148 (95.6)
	BOOST-NZ	<6 hours	28 (16.5)	28 (16.6)	56 (16.5)
		≥6 hours	142 (83.5)	141 (83.4)	283 (83.5)
	BOOST-II UK[b]	<6 hours	.	.	.
		≥6 hours	.	.	.
	BOOST-II AUS	<6 hours	59 (10.4)	60 (10.6)	119 (10.5)
		≥6 hours	506 (89.6)	506 (89.4)	1012 (89.5)
	NeOProM	**<6 hours**	**752 (38.0)**	**759 (38.3)**	**1511 (38.1)**
		≥6 hours	**1228 (62.0)**	**1225 (61.7)**	**2453 (61.9)**

eTable 3. Subgroup numbers by trial (continued)

			Lower oxygen saturation target N(%)	Higher oxygen saturation target N(%)	Total N(%)
Oximeter Software	SUPPORT	Original	654 (100.0)	662 (100.0)	1316 (100.0)
		Revised	0 (0.0)	0 (0.0)	0 (0.0)
		Mixed	0 (0.0)	0 (0.0)	0 (0.0)
	COT	Original	286 (47.5)	278 (46.4)	564 (47.0)
		Revised	284 (47.2)	279 (46.6)	563 (46.9)
		Mixed	32 (5.3)	42 (7.0)	74 (6.2)
	BOOST-NZ	Original	170 (100.0)	170 (100.0)	340 (100.0)
		Revised	0 (0.0)	0 (0.0)	0 (0.0)
		Mixed	0 (0.0)	0 (0.0)	0 (0.0)
	BOOST-II UK	Original	113 (23.3)	115 (23.6)	228 (23.4)
		Revised	373 (76.7)	372 (76.4)	745 (76.6)
		Mixed	0 (0.0)	0 (0.0)	0 (0.0)
	BOOST-II AUS	Original	346 (60.9)	346 (61.0)	692 (61.0)
		Revised	222 (39.1)	221 (39.0)	443 (39.0)
		Mixed	0 (0.0)	0 (0.0)	0 (0.0)
	NeOProM	**Original**	**1569 (63.3)**	**1571 (63.2)**	**3140 (63.2)**
		Revised	**879 (35.4)**	**872 (35.1)**	**1751 (35.3)**
		Mixed	**32 (1.3)**	**42 (1.7)**	**74 (1.5)**
Small for gestational age (trialist defined)	SUPPORT	No	613 (93.7)	607 (91.7)	1220 (92.7)
		Yes	41 (6.3)	55 (8.3)	96 (7.3)
	COT	No	548 (91.0)	548 (91.5)	1096 (91.3)
		Yes	54 (9.0)	51 (8.5)	105 (8.7)
	BOOST-NZ	No	153 (90.0)	157 (92.4)	310 (91.2)
		Yes	17 (10.0)	13 (7.6)	30 (8.8)
	BOOST-II UK	No	408 (84.5)	411 (85.1)	819 (84.8)
		Yes	75 (15.5)	72 (14.9)	147 (15.2)
	BOOST-II AUS	No	487 (85.9)	489 (86.2)	976 (86.1)
		Yes	80 (14.1)	78 (13.8)	158 (13.9)
	NeOProM	**No**	**2209 (89.2)**	**2212 (89.2)**	**4421 (89.2)**
		Yes	**267 (10.8)**	**269 (10.8)**	**536 (10.8)**

eTable 3. Subgroup numbers by trial (continued)

			Lower oxygen saturation target N(%)	Higher oxygen saturation target N(%)	Total N(%)
Small for gestational age (NeOProM defined)	SUPPORT	No	560 (85.6)	546 (82.5)	1106 (84.0)
		Yes	94 (14.4)	116 (17.5)	210 (16.0)
	COT	No	548 (91.0)	548 (91.5)	1096 (91.3)
		Yes	54 (9.0)	51 (8.5)	105 (8.7)
	BOOST-NZ	No	153 (90.0)	157 (92.4)	310 (91.2)
		Yes	17 (10.0)	13 (7.6)	30 (8.8)
	BOOST-II UK	No	428 (88.2)	430 (88.5)	858 (88.4)
		Yes	57 (11.8)	56 (11.5)	113 (11.6)
	BOOST-II AUS	No	487 (85.9)	489 (86.2)	976 (86.1)
		Yes	80 (14.1)	78 (13.8)	158 (13.9)
	NeOProM	**No**	**2176 (87.8)**	**2170 (87.4)**	**4346 (87.6)**
		Yes	**302 (12.2)**	**314 (12.6)**	**616 (12.4)**

Abbreviations

SUPPORT: Surfactant Positive Airway Pressure and Pulse Oximetry Trial; COT: Canadian Oxygen Trial; BOOST: Benefits of Oxygen Saturation Targeting; NZ: New Zealand; UK: United Kingdom; AUS: Australia; NeOProM: Neonatal Oxygenation Prospective Meta-analysis.

[a] Inborn - born inside the treating center; Outborn - born outside the treating center (e.g. transferred from another hospital)

[b] Not available for BOOST-II UK

[c] Less than 10th percentile using charts from Kramer et al.[1]

*Analysis adjusted for trial and multiple births

Subgroup analyses with statistically significant results at the p<0.05 level are highlighted in yellow in the remainder of this document.

eTable 4. Death or major disability (primary analysis)^, by subgroups

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
GA<26 wks	SUPPORT	178 (68.2)	261	197 (71.1)	277	0.96 (0.85, 1.08)	0.486	0.626
	COT	154 (60.6)	254	148 (59.9)	247	1.00 (0.88, 1.14)	1.000	
	BOOST NZ	35 (56.5)	62	32 (53.3)	60	1.10 (0.81, 1.50)	0.537	
	BOOST II UK	129 (72.5)	178	116 (68.6)	169	1.06 (0.92, 1.22)	0.415	
	BOOST II AUS	127 (57.5)	221	117 (52.2)	224	1.07 (0.90, 1.26)	0.441	
	NeOProM	**623 (63.8)**	**976**	**610 (62.4)**	**977**	**1.02 (0.96, 1.09)**	**0.509**	
GA>=26 wks	SUPPORT	185 (52.6)	352	177 (51.0)	347	1.04 (0.90, 1.20)	0.632	
	COT	144 (44.6)	323	134 (41.7)	321	1.03 (0.88, 1.22)	0.708	
	BOOST NZ	27 (33.3)	81	39 (46.4)	84	0.70 (0.48, 1.03)	0.069	
	BOOST II UK	102 (48.6)	210	95 (44.0)	216	1.11 (0.91, 1.35)	0.324	
	BOOST II AUS	110 (38.5)	286	95 (33.5)	284	1.15 (0.93, 1.42)	0.189	
	NeOProM	**568 (45.4)**	**1252**	**540 (43.1)**	**1252**	**1.05 (0.96, 1.14)**	**0.285**	
Inborn	SUPPORT	363 (59.2)	613	374 (59.9)	624	0.99 (0.90, 1.09)	0.873	0.718
	COT	277 (51.6)	537	256 (49.6)	516	1.01 (0.91, 1.13)	0.798	
	BOOST NZ	59 (43.7)	135	67 (49.3)	136	0.90 (0.70, 1.15)	0.395	
	BOOST II UK	205 (59.4)	345	184 (54.4)	338	1.11 (0.98, 1.26)	0.107	
	BOOST II AUS	220 (46.9)	469	193 (40.8)	473	1.12 (0.97, 1.28)	0.114	
	NeOProM	**1124 (53.5)**	**2099**	**1074 (51.5)**	**2087**	**1.04 (0.98, 1.10)**	**0.194**	
Outborn	SUPPORT		.		.		.	
	COT	21 (52.5)	40	26 (50.0)	52	1.03 (0.71, 1.49)	0.863	
	BOOST NZ	3 (37.5)	8	4 (50.0)	8	0.75 (0.24, 2.33)	0.618	
	BOOST II UK	26 (60.5)	43	27 (57.4)	47	1.05 (0.73, 1.51)	0.787	
	BOOST II AUS	17 (44.7)	38	19 (54.3)	35	0.80 (0.50, 1.28)	0.348	
	NeOProM	**67 (51.9)**	**129**	**76 (53.5)**	**142**	**0.99 (0.79, 1.24)**	**0.912**	
Vaginal	SUPPORT	111 (56.1)	198	112 (54.1)	207	1.04 (0.87, 1.24)	0.666	0.260
	COT	120 (56.1)	214	108 (47.2)	229	1.18 (0.99, 1.41)	0.062	
	BOOST NZ	29 (45.3)	64	35 (51.5)	68	0.88 (0.62, 1.25)	0.488	
	BOOST II UK	146 (61.1)	239	138 (58.2)	237	1.08 (0.93, 1.25)	0.306	
	BOOST II AUS	115 (47.7)	241	102 (44.3)	230	1.07 (0.88, 1.29)	0.496	
	NeOProM	**521 (54.5)**	**956**	**495 (51.0)**	**971**	**1.07 (0.99, 1.17)**	**0.092**	
Caesarean	SUPPORT	252 (60.7)	415	262 (62.8)	417	0.97 (0.87, 1.08)	0.583	
	COT	176 (48.8)	361	173 (51.2)	338	0.93 (0.82, 1.06)	0.269	
	BOOST NZ	33 (41.8)	79	36 (47.4)	76	0.90 (0.64, 1.27)	0.546	
	BOOST II UK	85 (57.0)	149	73 (49.3)	148	1.15 (0.94, 1.43)	0.180	
	BOOST II AUS	121 (45.7)	265	108 (39.3)	275	1.14 (0.95, 1.37)	0.169	
	NeOProM	**667 (52.6)**	**1269**	**652 (52.0)**	**1254**	**1.00 (0.93, 1.08)**	**0.928**	
ANS - No	SUPPORT	10 (50.0)	20	16 (57.1)	28	0.86 (0.49, 1.49)	0.585	0.348
	COT	47 (69.1)	68	40 (71.4)	56	0.97 (0.78, 1.20)	0.752	
	BOOST NZ	9 (52.9)	17	9 (60.0)	15	0.88 (0.48, 1.62)	0.658	
	BOOST II UK	22 (64.7)	34	27 (71.1)	38	0.96 (0.67, 1.37)	0.812	

eTable 4. Death or major disability (primary analysis)^, by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	BOOST II AUS	25 (48.1)	52	19 (50.0)	38	1.07 (0.70, 1.64)	0.766	
	NeOProM	**113 (59.2)**	**191**	**111 (63.4)**	**175**	**0.97 (0.83, 1.13)**	**0.714**	
ANS - Yes	SUPPORT	353 (59.5)	593	357 (60.0)	595	1.00 (0.91, 1.10)	0.963	
	COT	249 (49.1)	507	240 (47.1)	510	1.02 (0.91, 1.15)	0.744	
	BOOST NZ	53 (42.1)	126	62 (48.1)	129	0.88 (0.67, 1.16)	0.368	
	BOOST II UK	208 (59.1)	352	183 (53.0)	345	1.12 (0.99, 1.28)	0.079	
	BOOST II AUS	210 (46.4)	453	192 (41.3)	465	1.09 (0.95, 1.26)	0.212	
	NeOProM	**1073 (52.8)**	**2031**	**1034 (50.6)**	**2044**	**1.04 (0.98, 1.10)**	**0.176**	
Male	SUPPORT	210 (65.8)	319	232 (66.1)	351	1.00 (0.89, 1.11)	0.950	0.543
	COT	189 (59.1)	320	176 (57.3)	307	1.00 (0.88, 1.13)	1.000	
	BOOST NZ	43 (55.1)	78	43 (58.9)	73	0.94 (0.71, 1.24)	0.664	
	BOOST II UK	133 (64.9)	205	119 (58.9)	202	1.10 (0.95, 1.28)	0.213	
	BOOST II AUS	154 (57.9)	266	127 (48.3)	263	1.19 (1.02, 1.39)	0.030	
	NeOProM	**729 (61.4)**	**1188**	**697 (58.3)**	**1196**	**1.05 (0.98, 1.12)**	**0.150**	
Female	SUPPORT	153 (52.0)	294	142 (52.0)	273	1.00 (0.85, 1.18)	0.991	
	COT	109 (42.4)	257	106 (40.6)	261	1.03 (0.85, 1.26)	0.751	
	BOOST NZ	19 (29.2)	65	28 (39.4)	71	1.47 (0.65, 3.30)	0.352	
	BOOST II UK	98 (53.6)	183	92 (50.3)	183	1.08 (0.89, 1.30)	0.441	
	BOOST II AUS	83 (34.4)	241	85 (34.7)	245	1.00 (0.79, 1.26)	0.975	
	NeOProM	**462 (44.4)**	**1040**	**453 (43.9)**	**1033**	**1.02 (0.93, 1.12)**	**0.724**	
Singleton	SUPPORT	275 (59.9)	459	262 (57.5)	456	1.04 (0.94, 1.16)	0.451	0.075
	COT	197 (51.6)	382	188 (48.1)	391	1.07 (0.93, 1.24)	0.332	
	BOOST NZ	43 (41.3)	104	49 (45.8)	107	0.90 (0.66, 1.23)	0.516	
	BOOST II UK	160 (59.3)	270	147 (54.0)	272	1.10 (0.95, 1.27)	0.221	
	BOOST II AUS	182 (47.4)	384	161 (41.5)	388	1.14 (0.97, 1.34)	0.100	
	NeOProM	**857 (53.6)**	**1599**	**807 (50.0)**	**1614**	**1.07 (1.00, 1.14)**	**0.045**	
Multiple	SUPPORT	88 (57.1)	154	112 (66.7)	168	0.84 (0.69, 1.02)	0.083	
	COT	101 (51.8)	195	94 (53.1)	177	0.94 (0.81, 1.09)	0.422	
	BOOST NZ	19 (48.7)	39	22 (59.5)	37	0.87 (0.60, 1.26)	0.449	
	BOOST II UK	71 (60.2)	118	64 (56.6)	113	1.10 (0.90, 1.35)	0.363	
	BOOST II AUS	55 (44.7)	123	51 (42.5)	120	1.02 (0.80, 1.31)	0.869	
	NeOProM	**334 (53.1)**	**629**	**343 (55.8)**	**615**	**0.96 (0.88, 1.06)**	**0.418**	
start<6 hrs	SUPPORT	353 (59.1)	597	363 (59.8)	607	0.99 (0.90, 1.09)	0.902	0.483
	COT	9 (36.0)	25	14 (56.0)	25	0.31 (0.03, 3.73)	0.359	
	BOOST NZ	16 (64.0)	25	11 (45.8)	24	1.39 (0.82, 2.36)	0.224	
	BOOST II UK		.		.		.	
	BOOST II AUS	26 (50.0)	52	23 (41.8)	55	1.13 (0.74, 1.71)	0.571	
	NeOProM	**404 (57.8)**	**699**	**411 (57.8)**	**711**	**1.00 (0.91, 1.10)**	**0.991**	
start>=6 hrs	SUPPORT	2 (40.0)	5	1 (20.0)	5	0.96 (0.31, 3.01)	0.947	
	COT	289 (52.4)	552	268 (49.4)	543	1.04 (0.93, 1.16)	0.490	
	BOOST NZ	46 (39.0)	118	59 (49.6)	119	0.79 (0.60, 1.05)	0.110	

eTable 4. Death or major disability (primary analysis)^, by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	BOOST II UK		.		.		.	
	BOOST II AUS	211 (46.5)	454	188 (41.6)	452	1.11 (0.97, 1.28)	0.135	
	NeOProM	**548 (48.5)**	**1129**	**516 (46.1)**	**1119**	**1.04 (0.96, 1.13)**	**0.340**	
Original	SUPPORT	363 (59.2)	613	374 (59.9)	624	0.99 (0.90, 1.09)	0.873	0.087
software	COT	140 (50.9)	275	138 (52.3)	264	0.96 (0.82, 1.11)	0.573	
	BOOST NZ	62 (43.4)	143	71 (49.3)	144	0.89 (0.70, 1.14)	0.346	
	BOOST II UK	54 (65.9)	82	53 (57.6)	92	1.17 (0.92, 1.49)	0.191	
	BOOST II AUS	138 (44.5)	310	132 (41.4)	319	1.05 (0.89, 1.25)	0.560	
	NeOProM	**757 (53.2)**	**1423**	**768 (53.2)**	**1443**	**1.00 (0.94, 1.07)**	**0.949**	
Revised	SUPPORT		.		.		.	
software	COT	143 (52.8)	271	123 (46.4)	265	1.09 (0.93, 1.28)	0.297	
	BOOST NZ		.		.		.	
	BOOST II UK	177 (57.8)	306	158 (53.9)	293	1.08 (0.94, 1.24)	0.273	
	BOOST II AUS	99 (50.3)	197	80 (42.3)	189	1.18 (0.96, 1.46)	0.116	
	NeOProM	**419 (54.1)**	**774**	**361 (48.3)**	**747**	**1.11 (1.01, 1.22)**	**0.033**	
SGA:	SUPPORT	330 (57.6)	573	333 (58.4)	570	0.99 (0.89, 1.09)	0.803	0.562
Trialist	COT	265 (50.6)	524	250 (48.2)	519	1.02 (0.91, 1.15)	0.696	
defined -	BOOST II NZ	53 (41.7)	127	64 (48.5)	132	0.87 (0.67, 1.13)	0.295	
No	BOOST II UK	194 (59.3)	327	175 (53.7)	326	1.13 (0.99, 1.29)	0.063	
	BOOST II AUS	189 (43.9)	431	177 (40.7)	435	1.07 (0.92, 1.25)	0.358	
	NeOProM	**1031(52.0)**	**1982**	**999 (50.4)**	**1982**	**1.03 (0.97, 1.09)**	**0.308**	
Yes	SUPPORT	33 (82.5)	40	41 (75.9)	54	1.09 (0.88, 1.34)	0.420	
	COT	33 (62.3)	53	32 (65.3)	49	0.96 (0.71, 1.28)	0.773	
	BOOST II NZ	9 (56.3)	16	7 (58.3)	12	0.88 (0.47, 1.65)	0.697	
	BOOST II UK	36 (61.0)	59	33 (58.9)	56	3.05 (0.48, 19.3)	0.236	
	BOOST II AUS	48 (63.2)	76	35 (47.9)	73	1.30 (0.98, 1.73)	0.065	
	NeOProM	**159 (65.2)**	**244**	**148 (60.7)**	**244**	**1.08 (0.95, 1.23)**	**0.222**	
SGA:	SUPPORT	299 (57.2)	523	291 (56.9)	511	1.01 (0.90, 1.12)	0.910	0.870
NeOProM	COT	265 (50.6)	524	250 (48.2)	519	1.02 (0.91, 1.15)	0.696	
defined -	BOOST II NZ	53 (41.7)	127	64 (48.5)	132	0.87 (0.67, 1.13)	0.295	
No	BOOST II UK	204 (59.3)	344	184 (53.8)	342	1.11 (0.98, 1.26)	0.103	
	BOOST II AUS	189 (43.9)	431	177 (40.7)	435	1.07 (0.92, 1.25)	0.358	
	NeOProM	**1010 (51.8)**	**1949**	**966 (49.8)**	**1939**	**1.04 (0.98, 1.10)**	**0.230**	
Yes	SUPPORT	64 (71.1)	90	83 (73.5)	113	0.97 (0.81, 1.16)	0.737	
	COT	33 (62.3)	53	32 (65.3)	49	0.96 (0.71, 1.28)	0.773	
	BOOST II NZ	9 (56.3)	16	7 (58.3)	12	0.88 (0.47, 1.65)	0.697	
	BOOST II UK	27 (61.4)	44	27 (62.8)	43	0.98 (0.71, 1.36)	0.914	
	BOOST II AUS	48 (63.2)	76	35 (47.9)	73	1.30 (0.98, 1.73)	0.065	
	NeOProM	**181 (64.9)**	**279**	**184 (63.4)**	**290**	**1.01 (0.90, 1.15)**	**0.835**	

^ **Primary outcome as pre-specified in published NeOProM protocol**: composite outcome of death or major disability by 18-24 months' age, corrected for prematurity. Major disability is any of the following: Bayley-III Developmental Assessment cognitive score <85 and/or language score <85; severe visual loss; cerebral palsy with Gross Motor Function Classification System (GMFCS) level 2 or higher at 18-24 months' age, corrected for prematurity; or deafness requiring hearing aids.

*Analysis adjusted for trial and multiple births

Abbreviations/definitions

CI: confidence interval; RR: relative risk; GA: gestational age; SUPPORT: Surfactant Positive Airway Pressure and Pulse Oximetry Trial; COT: Canadian Oxygen Trial; BOOST: Benefits of Oxygen Saturation Targeting; NZ: New Zealand; UK: United Kingdom; AUS: Australia; NeOProM: Neonatal Oxygenation Prospective Meta-analysis; inborn: born inside the treating center; outborn: born outside the treating center (e.g. transferred from another hospital; vaginal: mode of delivery through the vagina; Caesarean: mode of delivery via surgical procedure; ANS: antenatal corticosteroids; singleton: child born as a single birth; multiple: more than one child per birth; start<6 hrs: intervention commenced less than 6 hours after birth; start>=6 hrs: intervention commenced greater than or equal to 6 hours after birth; original software: original oximeter software; revised software: revised oximeter software; SGA: small for gestational age; SGA NeOProM defined: small for gestational age as per definition used by NeOProM collaboration, i.e. less than 10th percentile using charts from Kramer et al.[1]

The subgroup analysis by oximeter software type (original vs revised) excludes n=74 infants in COT who were exposed to both the original and revised software.

Empty cells (.) indicate data not collected or not applicable in this trial.

eTable 5. Death or major disability (supportive analysis)[#], by subgroups

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
GA<26 wks	SUPPORT	178 (68.2)	261	197 (71.1)	277	0.96 (0.85, 1.08)	0.486	0.808
	COT	154 (60.6)	254	148 (59.9)	247	1.00 (0.88, 1.14)	1.000	
	BOOST NZ	38 (52.8)	72	33 (45.8)	72	1.19 (0.87, 1.62)	0.285	
	BOOST II UK	136 (65.4)	208	122 (58.1)	210	1.14 (0.98, 1.32)	0.100	
	BOOST II AUS	130 (55.8)	233	120 (51.7)	232	1.06 (0.90, 1.25)	0.518	
	NeOProM	**636 (61.9)**	**1028**	**620 (59.7)**	**1038**	**1.03 (0.97, 1.10)**	**0.354**	
GA>=26 wks	SUPPORT	186 (52.7)	353	177 (51.0)	347	1.04 (0.90, 1.20)	0.608	
	COT	144 (44.4)	324	135 (41.9)	322	1.03 (0.87, 1.21)	0.765	
	BOOST NZ	27 (28.4)	95	41 (42.7)	96	0.65 (0.44, 0.95)	0.026	
	BOOST II UK	109 (41.1)	265	98 (38.0)	258	1.08 (0.88, 1.34)	0.461	
	BOOST II AUS	116 (37.2)	312	97 (31.5)	308	1.18 (0.96, 1.45)	0.118	
	NeOProM	**582 (43.1)**	**1349**	**548 (41.2)**	**1331**	**1.04 (0.96, 1.14)**	**0.339**	
Inborn	SUPPORT	364 (59.3)	614	374 (59.9)	624	0.99 (0.90, 1.09)	0.893	0.901
	COT	277 (51.5)	538	256 (49.6)	516	1.01 (0.91, 1.13)	0.821	
	BOOST NZ	62 (39.5)	157	70 (44.9)	156	0.89 (0.69, 1.14)	0.348	
	BOOST II UK	217 (51.9)	418	193 (47.0)	411	1.12 (0.98, 1.28)	0.096	
	BOOST II AUS	227 (45.1)	503	198 (39.6)	500	1.11 (0.97, 1.28)	0.124	
	NeOProM	**1147 (51.4)**	**2230**	**1091 (49.4)**	**2207**	**1.04 (0.98, 1.10)**	**0.210**	
Outborn	SUPPORT		.		.		.	
	COT	21 (52.5)	40	27 (50.9)	53	1.02 (0.71, 1.47)	0.915	
	BOOST NZ	3 (30.0)	10	4 (33.3)	12	0.85 (0.25, 2.93)	0.797	
	BOOST II UK	28 (50.9)	55	27 (47.4)	57	1.08 (0.72, 1.60)	0.719	
	BOOST II AUS	19 (45.2)	42	19 (47.5)	40	0.96 (0.62, 1.51)	0.875	
	NeOProM	**71 (48.3)**	**147**	**77 (47.5)**	**162**	**1.02 (0.81, 1.29)**	**0.849**	
Vaginal	SUPPORT	111 (56.1)	198	112 (54.1)	207	1.04 (0.87, 1.24)	0.666	0.145
	COT	120 (56.1)	214	109 (47.4)	230	1.18 (0.99, 1.41)	0.069	
	BOOST NZ	31 (41.3)	75	36 (45.6)	79	0.90 (0.63, 1.29)	0.569	
	BOOST II UK	152 (54.1)	281	143 (49.5)	289	1.11 (0.95, 1.29)	0.210	
	BOOST II AUS	121 (46.4)	261	105 (43.0)	244	1.08 (0.89, 1.30)	0.439	
	NeOProM	**535 (52.0)**	**1029**	**505 (48.1)**	**1049**	**1.09 (1.00, 1.18)**	**0.055**	
Caesarean	SUPPORT	253 (60.8)	416	262 (62.8)	417	0.97 (0.87, 1.08)	0.605	
	COT	176 (48.6)	362	173 (51.2)	338	0.93 (0.81, 1.06)	0.254	
	BOOST NZ	34 (37.0)	92	38 (42.7)	89	0.88 (0.63, 1.24)	0.481	
	BOOST II UK	93 (48.4)	192	77 (43.0)	179	1.12 (0.90, 1.39)	0.308	
	BOOST II AUS	123 (43.6)	282	110 (37.7)	292	1.13 (0.94, 1.36)	0.180	
	NeOProM	**679 (50.5)**	**1344**	**660 (50.2)**	**1315**	**1.00 (0.93, 1.07)**	**0.906**	
ANS - No	SUPPORT	10 (50.0)	20	16 (57.1)	28	0.86 (0.49, 1.49)	0.585	0.336
	COT	47 (69.1)	68	41 (71.9)	57	0.96 (0.77, 1.19)	0.706	
	BOOST NZ	9 (45.0)	20	9 (52.9)	17	0.85 (0.44, 1.64)	0.643	
	BOOST II UK	22 (57.9)	38	28 (62.2)	45	0.95 (0.67, 1.35)	0.770	

eTable 5. Death or major disability (supportive analysis)[#], by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	BOOST II AUS	28 (47.5)	59	20 (50.0)	40	0.99 (0.67, 1.47)	0.964	
	NeOProM	**116 (56.6)**	**205**	**114 (61.0)**	**187**	**0.96 (0.82, 1.12)**	**0.612**	
ANS - Yes	SUPPORT	354 (59.6)	594	357 (60.0)	595	1.00 (0.91, 1.10)	0.982	
	COT	249 (49.0)	508	240 (47.1)	510	1.02 (0.90, 1.15)	0.767	
	BOOST NZ	56 (38.1)	147	65 (43.0)	151	0.89 (0.68, 1.16)	0.385	
	BOOST II UK	222 (51.3)	433	191 (45.4)	421	1.14 (0.99, 1.30)	0.070	
	BOOST II AUS	215 (44.5)	483	196 (39.7)	494	1.10 (0.95, 1.26)	0.195	
	NeOProM	**1096 (50.6)**	**2165**	**1049 (48.3)**	**2171**	**1.04 (0.98, 1.10)**	**0.175**	
Male	SUPPORT	210 (65.8)	319	232 (66.1)	351	1.00 (0.89, 1.11)	0.950	0.476
	COT	189 (58.9)	321	177 (57.5)	308	1.00 (0.88, 1.13)	0.940	
	BOOST NZ	45 (51.1)	88	45 (50.6)	89	1.02 (0.76, 1.36)	0.894	
	BOOST II UK	142 (56.6)	251	126 (50.0)	252	1.13 (0.96, 1.33)	0.156	
	BOOST II AUS	159 (56.2)	283	130 (46.4)	280	1.20 (1.03, 1.41)	0.023	
	NeOProM	**745 (59.0)**	**1262**	**710 (55.5)**	**1280**	**1.06 (0.99, 1.13)**	**0.106**	
Female	SUPPORT	154 (52.2)	295	142 (52.0)	273	1.00 (0.85, 1.18)	0.959	
	COT	109 (42.4)	257	106 (40.6)	261	1.03 (0.85, 1.26)	0.751	
	BOOST NZ	20 (25.3)	79	29 (36.7)	79	1.45 (0.65, 3.24)	0.362	
	BOOST II UK	103 (46.4)	222	94 (43.5)	216	1.07 (0.87, 1.31)	0.524	
	BOOST II AUS	87 (33.2)	262	87 (33.5)	260	1.00 (0.79, 1.26)	0.981	
	NeOProM	**473 (42.4)**	**1115**	**458 (42.1)**	**1089**	**1.01 (0.92, 1.11)**	**0.838**	
Singleton	SUPPORT	275 (59.9)	459	262 (57.5)	456	1.04 (0.94, 1.16)	0.451	0.096
	COT	197 (51.4)	383	189 (48.2)	392	1.07 (0.93, 1.23)	0.370	
	BOOST NZ	45 (36.9)	122	51 (41.5)	123	0.89 (0.65, 1.22)	0.464	
	BOOST II UK	169 (50.3)	336	153 (45.8)	334	1.10 (0.94, 1.29)	0.246	
	BOOST II AUS	189 (45.8)	413	165 (40.0)	413	1.15 (0.98, 1.34)	0.092	
	NeOProM	**875 (51.1)**	**1713**	**820 (47.7)**	**1718**	**1.07 (1.00, 1.14)**	**0.053**	
Multiple	SUPPORT	89 (57.4)	155	112 (66.7)	168	0.85 (0.70, 1.03)	0.093	
	COT	101 (51.8)	195	94 (53.1)	177	0.94 (0.81, 1.09)	0.422	
	BOOST NZ	20 (44.4)	45	23 (51.1)	45	0.89 (0.62, 1.28)	0.536	
	BOOST II UK	76 (55.5)	137	67 (50.0)	134	1.13 (0.91, 1.39)	0.268	
	BOOST II AUS	57 (43.2)	132	52 (40.9)	127	1.03 (0.81, 1.32)	0.781	
	NeOProM	**343 (51.7)**	**664**	**348 (53.5)**	**651**	**0.97 (0.88, 1.06)**	**0.504**	
start<6 hrs	SUPPORT	354 (59.2)	598	363 (59.8)	607	1.00 (0.90, 1.10)	0.922	0.376
	COT	9 (36.0)	25	14 (56.0)	25	0.31 (0.03, 3.73)	0.359	
	BOOST NZ	16 (57.1)	28	12 (42.9)	28	1.33 (0.77, 2.29)	0.307	
	BOOST II UK		.		.		.	
	BOOST II AUS	26 (45.6)	57	24 (42.1)	57	1.01 (0.66, 1.54)	0.958	
	NeOProM	**405 (57.2)**	**708**	**413 (57.6)**	**717**	**0.99 (0.91, 1.09)**	**0.894**	
>=6 hrs	SUPPORT	2 (40.0)	5	1 (20.0)	5	0.96 (0.31, 3.01)	0.947	
	COT	289 (52.3)	553	269 (49.4)	544	1.03 (0.93, 1.15)	0.528	
	BOOST NZ	49 (35.3)	139	61 (43.9)	139	0.80 (0.61, 1.06)	0.127	

eTable 5. Death or major disability (supportive analysis)[#], by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	BOOST II UK		.		.		.	
	BOOST II AUS	219 (45.2)	485	192 (39.8)	482	1.13 (0.98, 1.30)	0.082	
	NeOProM	**559 (47.3)**	**1182**	**523 (44.7)**	**1170**	**1.05 (0.96, 1.13)**	**0.277**	
Original	SUPPORT	364 (59.3)	614	374 (59.9)	624	0.99 (0.90, 1.09)	0.893	0.068
software	COT	140 (50.9)	275	138 (52.3)	264	0.96 (0.82, 1.11)	0.573	
	BOOST NZ	65 (38.9)	167	74 (44.0)	168	0.89 (0.69, 1.13)	0.340	
	BOOST II UK	60 (56.1)	107	56 (50.5)	111	1.12 (0.86, 1.45)	0.387	
	BOOST II AUS	144 (43.2)	333	133 (39.7)	335	1.07 (0.90, 1.27)	0.418	
	NeOProM	**773 (51.7)**	**1496**	**775 (51.6)**	**1502**	**1.00 (0.94, 1.07)**	**0.985**	
Revised	SUPPORT		.		.		.	
software	COT	143 (52.6)	272	124 (46.6)	266	1.08 (0.92, 1.27)	0.338	
	BOOST NZ		.		.		.	
	BOOST II UK	185 (50.5)	366	164 (45.9)	357	1.11 (0.96, 1.28)	0.175	
	BOOST II AUS	102 (48.1)	212	84 (41.0)	205	1.17 (0.95, 1.44)	0.138	
	NeOProM	**430 (50.6)**	**850**	**372 (44.9)**	**828**	**1.11 (1.01, 1.23)**	**0.026**	
SGA:	SUPPORT	331 (57.7)	574	333 (58.4)	570	0.99 (0.89, 1.09)	0.824	0.610
Trialist	COT	265 (50.6)	524	251 (48.3)	520	1.02 (0.91, 1.15)	0.719	
defined -	BOOST II NZ	56 (37.3)	150	66 (42.6)	155	0.88 (0.68, 1.14)	0.320	
No	BOOST II UK	204 (51.4)	397	182 (46.0)	396	1.14 (0.99, 1.30)	0.069	
	BOOST II AUS	197 (42.3)	466	182 (39.0)	467	1.08 (0.93, 1.26)	0.292	
	NeOProM	**1053(49.9)**	**2111**	**1014(48.1)**	**2108**	**1.03 (0.97, 1.10)**	**0.288**	
Yes	SUPPORT	33 (82.5)	40	41 (75.9)	54	1.09 (0.88, 1.34)	0.420	
	COT	33 (61.1)	54	32 (65.3)	49	0.94 (0.70, 1.26)	0.679	
	BOOST II NZ	9 (52.9)	17	8 (61.5)	13	0.79 (0.44, 1.45)	0.452	
	BOOST II UK	40 (54.1)	74	35 (50.7)	69	3.04 (0.48, 19.0)	0.236	
	BOOST II AUS	48 (61.5)	78	35 (47.9)	73	1.27 (0.96, 1.68)	0.097	
	NeOProM	**163 (62.0)**	**263**	**151 (58.5)**	**258**	**1.07 (0.94, 1.22)**	**0.307**	
SGA:	SUPPORT	300 (57.3)	524	291 (56.9)	511	1.01 (0.90, 1.12)	0.888	0.750
NeOProM	COT	265 (50.6)	524	251 (48.3)	520	1.02 (0.91, 1.15)	0.719	
defined -	BOOST II NZ	56 (37.3)	150	66 (42.6)	155	0.88 (0.68, 1.14)	0.320	
No	BOOST II UK	214 (51.4)	416	191 (46.0)	415	1.12 (0.98, 1.29)	0.093	
	BOOST II AUS	197 (42.3)	466	182 (39.0)	467	1.08 (0.93, 1.26)	0.292	
	NeOProM	**1032(49.6)**	**2080**	**981 (47.4)**	**2068**	**1.04 (0.98, 1.10)**	**0.203**	
Yes	SUPPORT	64 (71.1)	90	83 (73.5)	113	0.97 (0.81, 1.16)	0.737	
	COT	33 (61.1)	54	32 (65.3)	49	0.94 (0.70, 1.26)	0.679	
	BOOST II NZ	9 (52.9)	17	8 (61.5)	13	0.79 (0.44, 1.45)	0.452	
	BOOST II UK	31 (54.4)	57	29 (54.7)	53	1.00 (0.71, 1.41)	0.990	
	BOOST II AUS	48 (61.5)	78	35 (47.9)	73	1.27 (0.96, 1.68)	0.097	
	NeOProM	**185 (62.5)**	**296**	**187 (62.1)**	**301**	**1.00 (0.88, 1.13)**	**0.980**	

Supportive analysis of primary outcome: including using alternative sources of information for classifying major disability as used within individual trials. This may have included a Bayley-II Mental Developmental Index (MDI) score <70, or another validated assessment tool (e.g. Griffiths test), or a paediatrician assessment, or parent-reported measure of neurodevelopmental impairment (e.g. able to speak less than 5-10 words) or other measures.

*Analysis adjusted for trial and multiple births

Abbreviations/definitions

CI: confidence interval; RR: relative risk; GA: gestational age; SUPPORT: Surfactant Positive Airway Pressure and Pulse Oximetry Trial; COT: Canadian Oxygen Trial; BOOST: Benefits of Oxygen Saturation Targeting; NZ: New Zealand; UK: United Kingdom; AUS: Australia; NeOProM: Neonatal Oxygenation Prospective Meta-analysis; inborn: born inside the treating center; outborn: born outside the treating center (e.g. transferred from another hospital; vaginal: mode of delivery through the vagina; Caesarean: mode of delivery via surgical procedure; ANS: antenatal corticosteroids; singleton: child born as a single birth; multiple: more than one child per birth; start<6 hrs: intervention commenced less than 6 hours after birth; start>=6 hrs: intervention commenced greater than or equal to 6 hours after birth; original software: original oximeter software; revised software: revised oximeter software; SGA: small for gestational age; SGA NeOProM defined: small for gestational age as per definition used by NeOProM collaboration, i.e. less than 10th percentile using charts from Kramer et al.[1]

The subgroup analysis by oximeter software type (original vs revised) excludes n=74 infants in COT who were exposed to both the original and revised software.

Empty cells (.) indicate data not collected or not applicable in this trial.

eTable 6. Death or major disability (secondary analysis)[+], by subgroups

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
GA<26 wks	SUPPORT	126 (48.3)	261	139 (50.2)	277	0.96 (0.81, 1.15)	0.659	0.660
	COT	106 (42.9)	247	105 (43.6)	241	0.98 (0.81, 1.19)	0.839	
	BOOST NZ	23 (37.1)	62	20 (33.9)	59	1.07 (0.68, 1.67)	0.775	
	BOOST II UK	115 (64.6)	178	100 (59.2)	169	1.09 (0.93, 1.29)	0.296	
	BOOST II AUS	95 (43.2)	220	84 (37.5)	224	1.11 (0.89, 1.39)	0.366	
	NeOProM	**465 (48.0)**	**968**	**448 (46.2)**	**970**	**1.04 (0.95, 1.14)**	**0.389**	
GA>=26 wks	SUPPORT	91 (25.9)	352	83 (23.9)	347	1.08 (0.84, 1.41)	0.544	
	COT	74 (23.9)	309	62 (20.0)	310	1.16 (0.86, 1.57)	0.343	
	BOOST NZ	12 (14.8)	81	19 (22.9)	83	0.65 (0.35, 1.23)	0.186	
	BOOST II UK	79 (37.8)	209	71 (33.2)	214	1.14 (0.87, 1.48)	0.335	
	BOOST II AUS	63 (22.1)	285	60 (21.3)	282	1.06 (0.78, 1.44)	0.705	
	NeOProM	**319 (25.8)**	**1236**	**295 (23.9)**	**1236**	**1.08 (0.94, 1.24)**	**0.261**	
Inborn	SUPPORT	217 (35.4)	613	222 (35.6)	624	1.00 (0.86, 1.16)	0.979	0.173
	COT	165 (31.9)	518	149 (29.8)	500	1.05 (0.87, 1.25)	0.624	
	BOOST NZ	33 (24.4)	135	36 (26.9)	134	0.90 (0.61, 1.34)	0.619	
	BOOST II UK	173 (50.3)	344	145 (43.2)	336	1.17 (0.99, 1.37)	0.060	
	BOOST II AUS	146 (31.3)	467	129 (27.4)	471	1.14 (0.93, 1.38)	0.201	
	NeOProM	**734 (35.3)**	**2077**	**681 (33.0)**	**2065**	**1.07 (0.99, 1.17)**	**0.092**	
Outborn	SUPPORT		.		.		.	
	COT	15 (39.5)	38	18 (35.3)	51	1.07 (0.63, 1.84)	0.795	
	BOOST NZ	2 (25.0)	8	3 (37.5)	8	0.67 (0.15, 2.98)	0.596	
	BOOST II UK	21 (48.8)	43	26 (55.3)	47	0.86 (0.58, 1.26)	0.432	
	BOOST II AUS	12 (31.6)	38	15 (42.9)	35	0.74 (0.41, 1.34)	0.323	
	NeOProM	**50 (39.4)**	**127**	**62 (44.0)**	**141**	**0.88 (0.67, 1.15)**	**0.347**	
Vaginal	SUPPORT	71 (35.9)	198	69 (33.3)	207	1.07 (0.82, 1.40)	0.629	0.785
	COT	68 (33.0)	206	70 (30.7)	228	1.05 (0.81, 1.37)	0.710	
	BOOST NZ	19 (29.7)	64	19 (28.4)	67	1.01 (0.60, 1.68)	0.974	
	BOOST II UK	123 (51.7)	238	115 (48.7)	236	1.06 (0.89, 1.27)	0.516	
	BOOST II AUS	79 (32.9)	240	69 (30.1)	229	1.08 (0.83, 1.41)	0.575	
	NeOProM	**360 (38.1)**	**946**	**342 (35.4)**	**967**	**1.06 (0.95, 1.19)**	**0.309**	
Caesarean	SUPPORT	146 (35.2)	415	153 (36.7)	417	0.96 (0.80, 1.16)	0.700	
	COT	110 (31.6)	348	97 (30.1)	322	1.03 (0.82, 1.29)	0.798	
	BOOST NZ	16 (20.3)	79	20 (26.7)	75	0.76 (0.44, 1.33)	0.334	
	BOOST II UK	71 (47.7)	149	56 (38.1)	147	1.25 (0.96, 1.63)	0.095	
	BOOST II AUS	78 (29.5)	264	73 (26.6)	274	1.11 (0.86, 1.44)	0.419	
	NeOProM	**421 (33.5)**	**1255**	**399 (32.3)**	**1235**	**1.04 (0.93, 1.16)**	**0.466**	
ANS - No	SUPPORT	6 (30.0)	20	9 (32.1)	28	0.96 (0.40, 2.33)	0.928	0.293
	COT	37 (54.4)	68	30 (54.5)	55	0.99 (0.73, 1.36)	0.971	
	BOOST NZ	4 (23.5)	17	5 (33.3)	15	0.43 (0.08, 2.37)	0.334	
	BOOST II UK	19 (55.9)	34	23 (60.5)	38	0.96 (0.64, 1.44)	0.849	

eTable 6. Death or major disability (secondary analysis)[+], by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	BOOST II AUS	17 (32.7)	52	16 (42.1)	38	0.78 (0.45, 1.34)	0.366	
	NeOProM	**83 (43.5)**	**191**	**83 (47.7)**	**174**	**0.93 (0.75, 1.16)**	**0.536**	
ANS - Yes	SUPPORT	211 (35.6)	593	212 (35.6)	595	1.00 (0.86, 1.17)	0.974	
	COT	142 (29.2)	486	135 (27.3)	494	1.04 (0.86, 1.26)	0.693	
	BOOST NZ	31 (24.6)	126	34 (26.8)	127	0.92 (0.61, 1.39)	0.687	
	BOOST II UK	174 (49.6)	351	147 (42.9)	343	1.16 (0.98, 1.36)	0.080	
	BOOST II AUS	141 (31.3)	451	127 (27.4)	463	1.13 (0.93, 1.38)	0.212	
	NeOProM	**699 (34.8)**	**2007**	**655 (32.4)**	**2022**	**1.07 (0.99, 1.17)**	**0.104**	
Male	SUPPORT	128 (40.1)	319	139 (39.6)	351	1.01 (0.84, 1.22)	0.910	0.852
	COT	118 (37.8)	312	113 (37.9)	298	0.99 (0.81, 1.21)	0.894	
	BOOST NZ	24 (30.8)	78	21 (29.2)	72	1.04 (0.64, 1.70)	0.866	
	BOOST II UK	111 (54.4)	204	98 (49.0)	200	1.11 (0.92, 1.34)	0.298	
	BOOST II AUS	105 (39.8)	264	87 (33.2)	262	1.18 (0.94, 1.47)	0.162	
	NeOProM	**486 (41.3)**	**1177**	**458 (38.7)**	**1183**	**1.06 (0.96, 1.17)**	**0.217**	
Female	SUPPORT	89 (30.3)	294	83 (30.4)	273	1.00 (0.77, 1.29)	0.989	
	COT	62 (25.4)	244	54 (21.3)	253	1.19 (0.86, 1.63)	0.292	
	BOOST NZ	11 (16.9)	65	18 (25.7)	70	0.89 (0.46, 1.75)	0.742	
	BOOST II UK	83 (45.4)	183	73 (39.9)	183	1.14 (0.90, 1.45)	0.284	
	BOOST II AUS	53 (22.0)	241	57 (23.4)	244	0.96 (0.69, 1.32)	0.784	
	NeOProM	**298 (29.0)**	**1027**	**285 (27.9)**	**1023**	**1.05 (0.92, 1.20)**	**0.489**	
Singleton	SUPPORT	161 (35.1)	459	157 (34.4)	456	1.02 (0.85, 1.22)	0.837	0.176
	COT	114 (30.8)	370	107 (27.9)	383	1.10 (0.88, 1.38)	0.387	
	BOOST NZ	24 (23.1)	104	28 (26.4)	106	0.87 (0.54, 1.40)	0.576	
	BOOST II UK	135 (50.2)	269	117 (43.3)	270	1.16 (0.97, 1.39)	0.112	
	BOOST II AUS	125 (32.6)	383	107 (27.7)	386	1.18 (0.95, 1.46)	0.138	
	NeOProM	**559 (35.3)**	**1585**	**516 (32.2)**	**1601**	**1.10 (1.00, 1.21)**	**0.060**	
Multiple	SUPPORT	56 (36.4)	154	65 (38.7)	168	0.94 (0.69, 1.28)	0.698	
	COT	66 (35.5)	186	60 (35.7)	168	0.95 (0.74, 1.23)	0.704	
	BOOST NZ	11 (28.2)	39	11 (30.6)	36	0.91 (0.48, 1.71)	0.766	
	BOOST II UK	59 (50.0)	118	54 (47.8)	113	1.05 (0.81, 1.37)	0.704	
	BOOST II AUS	33 (27.0)	122	37 (30.8)	120	0.92 (0.64, 1.32)	0.638	
	NeOProM	**225 (36.3)**	**619**	**227 (37.5)**	**605**	**0.97 (0.84, 1.12)**	**0.696**	
start<6 hrs	SUPPORT	210 (35.2)	597	213 (35.1)	607	1.00 (0.86, 1.18)	0.952	0.493
	COT	6 (25.0)	24	9 (37.5)	24	0.29 (0.01, 16.1)	0.544	
	BOOST NZ	8 (32.0)	25	6 (26.1)	23	1.45 (0.65, 3.24)	0.365	
	BOOST II UK		.		.		.	
	BOOST II AUS	17 (32.7)	52	17 (30.9)	55	0.89 (0.50, 1.60)	0.704	
	NeOProM	**241 (34.5)**	**698**	**245 (34.6)**	**709**	**1.00 (0.86, 1.15)**	**0.957**	
>=6 hrs	SUPPORT	1 (20.0)	5	1 (20.0)	5	0.48 (0.08, 2.89)	0.424	
	COT	174 (32.7)	532	158 (30.0)	527	1.07 (0.90, 1.27)	0.469	
	BOOST NZ	27 (22.9)	118	32 (27.1)	118	0.83 (0.54, 1.28)	0.405	

eTable 6. Death or major disability (secondary analysis)[+], by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	BOOST II UK		.		.		.	
	BOOST II AUS	141 (31.2)	452	126 (28.0)	450	1.13 (0.93, 1.37)	0.235	
	NeOProM	**343 (31.0)**	**1107**	**317 (28.8)**	**1100**	**1.06 (0.94, 1.20)**	**0.327**	
Original	SUPPORT	217 (35.4)	613	222 (35.6)	624	1.00 (0.86, 1.16)	0.979	0.238
software	COT	91 (34.2)	266	83 (31.8)	261	1.07 (0.85, 1.35)	0.560	
	BOOST NZ	35 (24.5)	143	39 (27.5)	142	0.89 (0.60, 1.30)	0.536	
	BOOST II UK	42 (51.2)	82	45 (48.9)	92	1.02 (0.76, 1.38)	0.877	
	BOOST II AUS	93 (30.2)	308	88 (27.8)	317	1.09 (0.86, 1.39)	0.460	
	NeOProM	**478 (33.9)**	**1412**	**477 (33.2)**	**1436**	**1.02 (0.92, 1.13)**	**0.682**	
Revised	SUPPORT		.		.		.	
software	COT	84 (32.2)	261	72 (28.7)	251	1.10 (0.84, 1.43)	0.487	
	BOOST NZ		.		.		.	
	BOOST II UK	152 (49.8)	305	126 (43.3)	291	1.15 (0.97, 1.37)	0.106	
	BOOST II AUS	65 (33.0)	197	56 (29.6)	189	1.10 (0.82, 1.47)	0.532	
	NeOProM	**301 (39.4)**	**763**	**254 (34.7)**	**731**	**1.13 (0.99, 1.29)**	**0.060**	
SGA:	SUPPORT	187 (32.6)	573	189 (33.2)	570	0.99 (0.83, 1.17)	0.867	0.685
Trialist	COT	160 (31.8)	503	146 (29.0)	504	1.06 (0.88, 1.27)	0.528	
defined -	BOOST II NZ	30 (23.6)	127	33 (25.4)	130	0.93 (0.61, 1.41)	0.723	
No	BOOST II UK	163 (50.0)	326	141 (43.5)	324	1.15 (0.98, 1.35)	0.091	
	BOOST II AUS	127 (29.6)	429	117 (27.0)	433	1.08 (0.88, 1.34)	0.457	
	NeOProM	**667 (34.1)**	**1958**	**626 (31.9)**	**1961**	**1.06 (0.98, 1.16)**	**0.164**	
Yes	SUPPORT	30 (75.0)	40	33 (61.1)	54	1.20 (0.91, 1.59)	0.186	
	COT	20 (37.7)	53	21 (44.7)	47	0.88 (0.56, 1.39)	0.585	
	BOOST II NZ	5 (31.3)	16	6 (50.0)	12	0.57 (0.23, 1.42)	0.228	
	BOOST II UK	30 (50.8)	59	27 (48.2)	56	2.94 (0.48, 18.0)	0.243	
	BOOST II AUS	31 (40.8)	76	27 (37.0)	73	1.10 (0.74, 1.65)	0.744	
	NeOProM	**116 (47.5)**	**244**	**114 (47.1)**	**242**	**1.03 (0.86, 1.24)**	**0.747**	
SGA:	SUPPORT	168 (32.1)	523	164 (32.1)	511	1.01 (0.84, 1.21)	0.939	0.431
NeOProM	COT	160 (31.8)	503	146 (29.0)	504	1.06 (0.88, 1.27)	0.528	
defined -	BOOST II NZ	30 (23.6)	127	33 (25.4)	130	0.93 (0.61, 1.41)	0.723	
No	BOOST II UK	171 (49.9)	343	148 (43.5)	340	1.14 (0.97, 1.34)	0.111	
	BOOST II AUS	127 (29.6)	429	117 (27.0)	433	1.08 (0.88, 1.34)	0.457	
	NeOProM	**656 (34.1)**	**1925**	**608 (31.7)**	**1918**	**1.07 (0.98, 1.17)**	**0.126**	
Yes	SUPPORT	49 (54.4)	90	58 (51.3)	113	1.03 (0.79, 1.34)	0.829	
	COT	20 (37.7)	53	21 (44.7)	47	0.88 (0.56, 1.39)	0.585	
	BOOST II NZ	5 (31.3)	16	6 (50.0)	12	0.57 (0.23, 1.42)	0.228	
	BOOST II UK	23 (52.3)	44	23 (53.5)	43	0.98 (0.66, 1.47)	0.926	
	BOOST II AUS	31 (40.8)	76	27 (37.0)	73	1.10 (0.74, 1.65)	0.744	
	NeOProM	**128 (45.9)**	**279**	**135 (46.9)**	**288**	**0.97 (0.81, 1.16)**	**0.761**	

+ **Secondary analysis:** composite outcome of death or major disability by 18-24 months' age, corrected for prematurity. Major disability is any of the following: Bayley-III Developmental Assessment cognitive score <70 and/or language score <70; severe visual loss; cerebral palsy with Gross Motor Function Classification System (GMFCS) level 2 or higher at 18-24 months' age, corrected for prematurity; or deafness requiring hearing aids.

*Analysis adjusted for trial and multiple births

Abbreviations/definitions

CI: confidence interval; RR: relative risk; GA: gestational age; SUPPORT: Surfactant Positive Airway Pressure and Pulse Oximetry Trial; COT: Canadian Oxygen Trial; BOOST: Benefits of Oxygen Saturation Targeting; NZ: New Zealand; UK: United Kingdom; AUS: Australia; NeOProM: Neonatal Oxygenation Prospective Meta-analysis; inborn: born inside the treating center; outborn: born outside the treating center (e.g. transferred from another hospital; vaginal: mode of delivery through the vagina; Caesarean: mode of delivery via surgical procedure; ANS: antenatal corticosteroids; singleton: child born as a single birth; multiple: more than one child per birth; start<6 hrs: intervention commenced less than 6 hours after birth; start>=6 hrs: intervention commenced greater than or equal to 6 hours after birth; original software: original oximeter software; revised software: revised oximeter software; SGA: small for gestational age; SGA NeOProM defined: small for gestational age as per definition used by NeOProM collaboration, i.e. less than 10th percentile using charts from Kramer et al.[1]

The subgroup analysis by oximeter software type (original vs revised) excludes n=74 infants in COT who were exposed to both the original and revised software.

Empty cells (.) indicate data not collected or not applicable in this trial.

eTable 7. Death or major disability (trialist defined)˜, by subgroups

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
GA<26 wks	SUPPORT	115 (44.1)	261	112 (40.6)	276	1.09 (0.89, 1.33)	0.424	0.868
	COT	154 (60.6)	254	148 (59.9)	247	1.00 (0.88, 1.14)	1.000	
	BOOST NZ	38 (52.8)	72	35 (48.6)	72	1.15 (0.84, 1.56)	0.385	
	BOOST II UK	136 (65.4)	208	122 (58.1)	210	1.14 (0.98, 1.32)	0.100	
	BOOST II AUS	131 (56.0)	234	120 (51.1)	235	1.07 (0.91, 1.26)	0.434	
	NeOProM	**574 (55.8)**	**1029**	**537 (51.6)**	**1040**	**1.07 (1.00, 1.16)**	**0.065**	
GA>=26 wks	SUPPORT	70 (19.9)	351	59 (17.1)	346	1.18 (0.86, 1.61)	0.315	
	COT	144 (44.4)	324	135 (41.9)	322	1.03 (0.87, 1.21)	0.765	
	BOOST NZ	27 (28.4)	95	41 (42.7)	96	0.65 (0.44, 0.95)	0.026	
	BOOST II UK	109 (41.1)	265	98 (38.0)	258	1.08 (0.88, 1.34)	0.461	
	BOOST II AUS	116 (36.8)	315	97 (31.3)	310	1.18 (0.96, 1.44)	0.125	
	NeOProM	**466 (34.5)**	**1350**	**430 (32.3)**	**1332**	**1.06 (0.96, 1.17)**	**0.288**	
Inborn	SUPPORT	185 (30.2)	612	171 (27.5)	622	1.10 (0.92, 1.32)	0.278	0.690
	COT	277 (51.5)	538	256 (49.6)	516	1.01 (0.91, 1.13)	0.821	
	BOOST NZ	62 (39.5)	157	72 (46.2)	156	0.87 (0.68, 1.11)	0.269	
	BOOST II UK	217 (51.9)	418	193 (47.0)	411	1.12 (0.98, 1.28)	0.096	
	BOOST II AUS	228 (45.1)	506	198 (39.2)	505	1.12 (0.98, 1.29)	0.104	
	NeOProM	**969 (43.4)**	**2231**	**890 (40.3)**	**2210**	**1.07 (1.00, 1.14)**	**0.052**	
Outborn	SUPPORT		.		.		.	
	COT	21 (52.5)	40	27 (50.9)	53	1.02 (0.71, 1.47)	0.915	
	BOOST NZ	3 (30.0)	10	4 (33.3)	12	0.85 (0.25, 2.93)	0.797	
	BOOST II UK	28 (50.9)	55	27 (47.4)	57	1.08 (0.72, 1.60)	0.719	
	BOOST II AUS	19 (44.2)	43	19 (47.5)	40	0.94 (0.60, 1.48)	0.786	
	NeOProM	**71 (48.0)**	**148**	**77 (47.5)**	**162**	**1.02 (0.81, 1.28)**	**0.887**	
Vaginal	SUPPORT	62 (31.5)	197	52 (25.2)	206	1.24 (0.90, 1.69)	0.187	0.179
	COT	120 (56.1)	214	109 (47.4)	230	1.18 (0.99, 1.41)	0.069	
	BOOST NZ	31 (41.3)	75	37 (46.8)	79	0.88 (0.61, 1.27)	0.493	
	BOOST II UK	152 (54.1)	281	143 (49.5)	289	1.11 (0.95, 1.29)	0.210	
	BOOST II AUS	122 (46.2)	264	105 (42.5)	247	1.08 (0.90, 1.31)	0.403	
	NeOProM	**487 (47.2)**	**1031**	**446 (42.4)**	**1051**	**1.11 (1.01, 1.22)**	**0.023**	
Caesarean	SUPPORT	123 (29.6)	415	119 (28.6)	416	1.04 (0.84, 1.30)	0.712	
	COT	176 (48.6)	362	173 (51.2)	338	0.93 (0.81, 1.06)	0.254	
	BOOST NZ	34 (37.0)	92	39 (43.8)	89	0.86 (0.62, 1.21)	0.395	
	BOOST II UK	93 (48.4)	192	77 (43.0)	179	1.12 (0.90, 1.39)	0.308	
	BOOST II AUS	123 (43.5)	283	110 (37.4)	294	1.14 (0.95, 1.37)	0.171	
	NeOProM	**549 (40.8)**	**1344**	**518 (39.4)**	**1316**	**1.02 (0.94, 1.11)**	**0.667**	
ANS - No	SUPPORT	5 (25.0)	20	4 (14.3)	28	1.77 (0.55, 5.71)	0.340	0.282
	COT	47 (69.1)	68	41 (71.9)	57	0.96 (0.77, 1.19)	0.706	
	BOOST NZ	9 (45.0)	20	9 (52.9)	17	0.85 (0.44, 1.64)	0.643	
	BOOST II UK	22 (57.9)	38	28 (62.2)	45	0.95 (0.67, 1.35)	0.770	

eTable 7. Death or major disability (trialist defined)˜, by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	BOOST II AUS	28 (45.9)	61	20 (50.0)	40	0.95 (0.64, 1.42)	0.817	
	NeOProM	**111 (53.6)**	**207**	**102 (54.5)**	**187**	**0.97 (0.82, 1.13)**	**0.665**	
ANS - Yes	SUPPORT	180 (30.4)	592	166 (28.0)	593	1.09 (0.91, 1.31)	0.334	
	COT	249 (49.0)	508	240 (47.1)	510	1.02 (0.90, 1.15)	0.767	
	BOOST NZ	56 (38.1)	147	67 (44.4)	151	0.87 (0.66, 1.13)	0.294	
	BOOST II UK	222 (51.3)	433	191 (45.4)	421	1.14 (0.99, 1.30)	0.070	
	BOOST II AUS	216 (44.5)	485	196 (39.3)	499	1.11 (0.96, 1.27)	0.158	
	NeOProM	**923 (42.6)**	**2165**	**860 (39.6)**	**2174**	**1.07 (1.00, 1.15)**	**0.049**	
Male	SUPPORT	107 (33.5)	319	106 (30.2)	351	1.11 (0.88, 1.39)	0.371	0.383
	COT	189 (58.9)	321	177 (57.5)	308	1.00 (0.88, 1.13)	0.940	
	BOOST NZ	45 (51.1)	88	45 (50.6)	89	1.02 (0.76, 1.36)	0.894	
	BOOST II UK	142 (56.6)	251	126 (50.0)	252	1.13 (0.96, 1.33)	0.156	
	BOOST II AUS	159 (55.4)	287	130 (45.9)	283	1.19 (1.02, 1.40)	0.028	
	NeOProM	**642 (50.7)**	**1266**	**584 (45.5)**	**1283**	**1.09 (1.01, 1.17)**	**0.030**	
Female	SUPPORT	78 (26.6)	293	65 (24.0)	271	1.12 (0.84, 1.50)	0.444	
	COT	109 (42.4)	257	106 (40.6)	261	1.03 (0.85, 1.26)	0.751	
	BOOST NZ	20 (25.3)	79	31 (39.2)	79	1.44 (0.67, 3.12)	0.353	
	BOOST II UK	103 (46.4)	222	94 (43.5)	216	1.07 (0.87, 1.31)	0.524	
	BOOST II AUS	88 (33.6)	262	87 (33.2)	262	1.02 (0.80, 1.28)	0.896	
	NeOProM	**398 (35.8)**	**1113**	**383 (35.2)**	**1089**	**1.03 (0.92, 1.14)**	**0.632**	
Singleton	SUPPORT	136 (29.7)	458	118 (26.0)	454	1.14 (0.93, 1.41)	0.213	0.228
	COT	197 (51.4)	383	189 (48.2)	392	1.07 (0.93, 1.23)	0.370	
	BOOST NZ	45 (36.9)	122	52 (42.3)	123	0.87 (0.64, 1.19)	0.389	
	BOOST II UK	169 (50.3)	336	153 (45.8)	334	1.10 (0.94, 1.29)	0.246	
	BOOST II AUS	190 (45.7)	416	165 (39.6)	417	1.15 (0.99, 1.35)	0.076	
	NeOProM	**737 (43.0)**	**1715**	**677 (39.4)**	**1720**	**1.09 (1.01, 1.18)**	**0.028**	
Multiple	SUPPORT	49 (31.8)	154	53 (31.5)	168	1.01 (0.71, 1.43)	0.956	
	COT	101 (51.8)	195	94 (53.1)	177	0.94 (0.81, 1.09)	0.422	
	BOOST NZ	20 (44.4)	45	24 (53.3)	45	0.88 (0.61, 1.25)	0.468	
	BOOST II UK	76 (55.5)	137	67 (50.0)	134	1.13 (0.91, 1.39)	0.268	
	BOOST II AUS	57 (42.9)	133	52 (40.6)	128	1.03 (0.81, 1.31)	0.804	
	NeOProM	**303 (45.6)**	**664**	**290 (44.5)**	**652**	**1.01 (0.91, 1.12)**	**0.864**	
start<6 hrs	SUPPORT	179 (30.0)	596	163 (26.9)	605	1.12 (0.93, 1.34)	0.235	0.795
	COT	9 (36.0)	25	14 (56.0)	25	0.31 (0.03, 3.73)	0.359	
	BOOST NZ	16 (57.1)	28	12 (42.9)	28	1.33 (0.77, 2.29)	0.307	
	BOOST II UK		.		.		.	
	BOOST II AUS	26 (45.6)	57	24 (41.4)	58	1.03 (0.68, 1.57)	0.889	
	NeOProM	**230 (32.6)**	**706**	**213 (29.7)**	**716**	**1.08 (0.93, 1.27)**	**0.324**	
>=6 hrs	SUPPORT	0	5	1 (20.0)	5		***	
	COT	289 (52.3)	553	269 (49.4)	544	1.03 (0.93, 1.15)	0.528	
	BOOST NZ	49 (35.3)	139	63 (45.3)	139	0.78 (0.59, 1.03)	0.085	

eTable 7. Death or major disability (trialist defined)˜, by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	BOOST II UK		.		.		.	
	BOOST II AUS	220 (45.0)	489	192 (39.5)	486	1.13 (0.99, 1.30)	0.075	
	NeOProM	**558 (47.0)**	**1186**	**525 (44.7)**	**1174**	**1.04 (0.96, 1.13)**	**0.324**	
Original	SUPPORT	185 (30.2)	612	171 (27.5)	622	1.10 (0.92, 1.32)	0.278	0.221
software	COT	140 (50.9)	275	138 (52.3)	264	0.96 (0.82, 1.11)	0.573	
	BOOST NZ	65 (38.9)	167	76 (45.2)	168	0.87 (0.68, 1.11)	0.264	
	BOOST II UK	60 (56.1)	107	56 (50.5)	111	1.12 (0.86, 1.45)	0.387	
	BOOST II AUS	145 (43.3)	335	133 (39.2)	339	1.09 (0.92, 1.29)	0.344	
	NeOProM	**595 (39.8)**	**1496**	**574 (38.2)**	**1504**	**1.03 (0.95, 1.12)**	**0.506**	
Revised	SUPPORT		.		.		.	
software	COT	143 (52.6)	272	124 (46.6)	266	1.08 (0.92, 1.27)	0.338	
	BOOST NZ		.		.		.	
	BOOST II UK	185 (50.5)	366	164 (45.9)	357	1.11 (0.96, 1.28)	0.175	
	BOOST II AUS	102 (47.7)	214	84 (40.8)	206	1.16 (0.94, 1.43)	0.158	
	NeOProM	**430 (50.5)**	**852**	**372 (44.9)**	**829**	**1.11 (1.01, 1.23)**	**0.029**	
SGA:	SUPPORT	156 (27.3)	572	146 (25.7)	568	1.07 (0.87, 1.30)	0.527	0.679
Trialist	COT	265 (50.6)	524	251 (48.3)	520	1.02 (0.91, 1.15)	0.719	
defined -	BOOST II NZ	56 (37.3)	150	68 (43.9)	155	0.86 (0.66, 1.11)	0.234	
No	BOOST II UK	204 (51.4)	397	182 (46.0)	396	1.14 (0.99, 1.30)	0.069	
	BOOST II AUS	198 (42.2)	469	182 (38.6)	471	1.09 (0.94, 1.26)	0.260	
	NeOProM	**879 (41.6)**	**2112**	**829 (39.3)**	**2110**	**1.06 (0.99, 1.13)**	**0.113**	
Yes	SUPPORT	29 (72.5)	40	25 (46.3)	54	1.54 (1.09, 2.17)	0.014	
	COT	33 (61.1)	54	32 (65.3)	49	0.94 (0.70, 1.26)	0.679	
	BOOST II NZ	9 (52.9)	17	8 (61.5)	13	0.79 (0.44, 1.45)	0.452	
	BOOST II UK	40 (54.1)	74	35 (50.7)	69	3.04 (0.48, 19.0)	0.236	
	BOOST II AUS	48 (60.8)	79	35 (47.3)	74	1.27 (0.96, 1.68)	0.099	
	NeOProM	**159 (60.2)**	**264**	**135 (52.1)**	**259**	**1.16 (0.99, 1.34)**	**0.060**	
SGA:	SUPPORT	145 (27.8)	522	124 (24.4)	509	1.15 (0.93, 1.42)	0.196	0.819
NeOProM	COT	265 (50.6)	524	251 (48.3)	520	1.02 (0.91, 1.15)	0.719	
defined -	BOOST II NZ	56 (37.3)	150	68 (43.9)	155	0.86 (0.66, 1.11)	0.234	
No	BOOST II UK	214 (51.4)	416	191 (46.0)	415	1.12 (0.98, 1.29)	0.093	
	BOOST II AUS	198 (42.2)	469	182 (38.6)	471	1.09 (0.94, 1.26)	0.260	
	NeOProM	**878 (42.2)**	**2081**	**816 (39.4)**	**2070**	**1.06 (0.99, 1.14)**	**0.077**	
Yes	SUPPORT	40 (44.4)	90	47 (41.6)	113	1.07 (0.78, 1.48)	0.657	
	COT	33 (61.1)	54	32 (65.3)	49	0.94 (0.70, 1.26)	0.679	
	BOOST II NZ	9 (52.9)	17	8 (61.5)	13	0.79 (0.44, 1.45)	0.452	
	BOOST II UK	31 (54.4)	57	29 (54.7)	53	1.00 (0.71, 1.41)	0.990	
	BOOST II AUS	48 (60.8)	79	35 (47.3)	74	1.27 (0.96, 1.68)	0.099	
	NeOProM	**161 (54.2)**	**297**	**151 (50.0)**	**302**	**1.04 (0.89, 1.21)**	**0.597**	

~ Trialist defined analysis: primary outcome as defined by trialists - includes alternative measures of disability as described in 'supportive analysis of primary outcome'

*Analysis adjusted for trial and multiple births

Abbreviations/definitions

CI: confidence interval; RR: relative risk; GA: gestational age; SUPPORT: Surfactant Positive Airway Pressure and Pulse Oximetry Trial; COT: Canadian Oxygen Trial; BOOST: Benefits of Oxygen Saturation Targeting; NZ: New Zealand; UK: United Kingdom; AUS: Australia; NeOProM: Neonatal Oxygenation Prospective Meta-analysis; inborn: born inside the treating center; outborn: born outside the treating center (e.g. transferred from another hospital; vaginal: mode of delivery through the vagina; Caesarean: mode of delivery via surgical procedure; ANS: antenatal corticosteroids; singleton: child born as a single birth; multiple: more than one child per birth; start<6 hrs: intervention commenced less than 6 hours after birth; start>=6 hrs: intervention commenced greater than or equal to 6 hours after birth; original software: original oximeter software; revised software: revised oximeter software; SGA: small for gestational age; SGA NeOProM defined: small for gestational age as per definition used by NeOProM collaboration, i.e. less than 10th percentile using charts from Kramer et al.[1]

The subgroup analysis by oximeter software type (original vs revised) excludes n=74 infants in COT who were exposed to both the original and revised software.

Empty cells (.) indicate data not collected or not applicable in this trial.

*** Low / no event rate(s) makes parameter not estimable.

eTable 8. Major disability (primary analysis)^, by subgroups

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
GA<26 wks	SUPPORT	87 (51.2)	170	118 (59.6)	198	0.86 (0.71, 1.04)	0.119	0.252
	COT	87 (46.5)	187	84 (45.9)	183	1.00 (0.81, 1.22)	0.978	
	BOOST NZ	14 (34.1)	41	17 (37.0)	46	1.21 (0.69, 2.13)	0.500	
	BOOST II UK	44 (47.3)	93	51 (49.0)	104	0.96 (0.72, 1.29)	0.797	
	BOOST II AUS	60 (39.0)	154	60 (35.9)	167	1.05 (0.80, 1.37)	0.718	
	NeOProM	**292 (45.3)**	**645**	**330 (47.3)**	**698**	**0.96 (0.85, 1.07)**	**0.430**	
GA>=26 wks	SUPPORT	136 (44.9)	303	138 (44.8)	308	1.01 (0.84, 1.22)	0.889	
	COT	114 (38.9)	293	110 (37.0)	297	1.01 (0.84, 1.23)	0.890	
	BOOST NZ	23 (29.9)	77	27 (37.5)	72	0.75 (0.48, 1.17)	0.207	
	BOOST II UK	65 (37.6)	173	62 (33.9)	183	1.15 (0.89, 1.50)	0.279	
	BOOST II AUS	77 (30.4)	253	65 (25.6)	254	1.21 (0.92, 1.58)	0.174	
	NeOProM	**415 (37.8)**	**1099**	**402 (36.1)**	**1114**	**1.04 (0.94, 1.16)**	**0.425**	
Inborn	SUPPORT	223 (47.1)	473	256 (50.6)	506	0.94 (0.82, 1.07)	0.340	0.501
	COT	186 (41.7)	446	179 (40.8)	439	1.00 (0.86, 1.15)	0.956	
	BOOST NZ	35 (31.5)	111	43 (38.1)	113	0.83 (0.58, 1.19)	0.320	
	BOOST II UK	98 (41.2)	238	99 (39.1)	253	1.08 (0.88, 1.32)	0.479	
	BOOST II AUS	129 (34.1)	378	120 (30.0)	400	1.12 (0.93, 1.36)	0.240	
	NeOProM	**671 (40.8)**	**1646**	**697 (40.7)**	**1711**	**1.00 (0.92, 1.08)**	**0.926**	
Outborn	SUPPORT		.		.		.	
	COT	15 (44.1)	34	15 (36.6)	41	1.21 (0.69, 2.10)	0.474	
	BOOST NZ	2 (28.6)	7	1 (20.0)	5	1.43 (0.17, 11.8)	0.740	
	BOOST II UK	11 (39.3)	28	14 (41.2)	34	0.98 (0.50, 1.90)	0.942	
	BOOST II AUS	8 (27.6)	29	5 (23.8)	21	1.03 (0.39, 2.71)	0.950	
	NeOProM	**36 (36.7)**	**98**	**35 (34.7)**	**101**	**1.14 (0.79, 1.65)**	**0.476**	
Vaginal	SUPPORT	59 (40.4)	146	79 (45.4)	174	0.88 (0.68, 1.14)	0.347	0.499
	COT	84 (47.2)	178	72 (37.3)	193	1.26 (1.00, 1.60)	0.051	
	BOOST NZ	14 (28.6)	49	20 (37.0)	54	1.71 (0.70, 4.19)	0.241	
	BOOST II UK	63 (40.4)	156	67 (40.4)	166	1.01 (0.78, 1.32)	0.913	
	BOOST II AUS	63 (33.3)	189	59 (31.6)	187	1.04 (0.78, 1.38)	0.813	
	NeOProM	**283 (39.4)**	**718**	**297 (38.4)**	**774**	**1.04 (0.92, 1.18)**	**0.551**	
Caesarean	SUPPORT	164 (50.2)	327	177 (53.3)	332	0.95 (0.81, 1.10)	0.494	
	COT	117 (38.7)	302	121 (42.3)	286	0.89 (0.75, 1.05)	0.178	
	BOOST NZ	23 (33.3)	69	24 (37.5)	64	0.88 (0.56, 1.39)	0.577	
	BOOST II UK	46 (41.8)	110	46 (38.0)	121	1.13 (0.84, 1.51)	0.433	
	BOOST II AUS	73 (33.6)	217	65 (28.0)	232	1.20 (0.93, 1.56)	0.156	
	NeOProM	**423 (41.3)**	**1025**	**433 (41.8)**	**1035**	**0.98 (0.89, 1.08)**	**0.691**	
ANS - No	SUPPORT	7 (41.2)	17	12 (50.0)	24	0.79 (0.39, 1.58)	0.500	0.586
	COT	25 (54.3)	46	26 (61.9)	42	0.67 (0.32, 1.44)	0.309	
	BOOST NZ	5 (38.5)	13	4 (40.0)	10	1.00 (0.91, 1.11)	0.959	
	BOOST II UK	8 (40.0)	20	9 (45.0)	20	0.89 (0.43, 1.83)	0.997	

eTable 8. Major disability (primary analysis)^, by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	BOOST II AUS	13 (32.5)	40	8 (29.6)	27	1.05 (0.50, 2.23)	0.889	
	NeOProM	**58 (42.6)**	**136**	**59 (48.0)**	**123**	**0.96 (0.70, 1.32)**	**0.814**	
ANS - Yes	SUPPORT	216 (47.4)	456	244 (50.6)	482	0.94 (0.83, 1.08)	0.412	
	COT	175 (40.4)	433	168 (38.4)	438	1.02 (0.88, 1.19)	0.755	
	BOOST NZ	32 (30.5)	105	40 (37.0)	108	0.83 (0.56, 1.21)	0.327	
	BOOST II UK	101 (41.2)	245	103 (38.9)	265	1.08 (0.88, 1.33)	0.476	
	BOOST II AUS	122 (33.4)	365	117 (30.0)	390	1.09 (0.90, 1.33)	0.379	
	NeOProM	**646 (40.3)**	**1604**	**672 (39.9)**	**1683**	**1.00 (0.93, 1.09)**	**0.919**	
Male	SUPPORT	128 (54.0)	237	159 (57.2)	278	0.95 (0.80, 1.11)	0.497	0.338
	COT	134 (50.6)	265	116 (47.0)	247	1.03 (0.87, 1.22)	0.728	
	BOOST NZ	25 (41.7)	60	31 (50.8)	61	0.82 (0.56, 1.20)	0.307	
	BOOST II UK	63 (46.7)	135	65 (43.9)	148	1.11 (0.87, 1.43)	0.405	
	BOOST II AUS	90 (44.6)	202	75 (35.5)	211	1.28 (1.01, 1.61)	0.039	
	NeOProM	**440 (48.9)**	**899**	**446 (47.2)**	**945**	**1.03 (0.94, 1.13)**	**0.521**	
Female	SUPPORT	95 (40.3)	236	97 (42.5)	228	0.93 (0.75, 1.17)	0.544	
	COT	67 (31.2)	215	78 (33.5)	233	0.92 (0.71, 1.20)	0.548	
	BOOST NZ	12 (20.7)	58	13 (22.8)	57	0.91 (0.45, 1.82)	0.954	
	BOOST II UK	46 (35.1)	131	48 (34.5)	139	1.03 (0.75, 1.40)	0.872	
	BOOST II AUS	47 (22.9)	205	50 (23.8)	210	0.96 (0.68, 1.35)	0.815	
	NeOProM	**267 (31.6)**	**845**	**286 (33.0)**	**867**	**0.95 (0.84, 1.09)**	**0.479**	
Singleton	SUPPORT	167 (47.6)	351	186 (48.9)	380	0.97 (0.84, 1.13)	0.712	0.329
	COT	139 (42.9)	324	128 (38.7)	331	1.11 (0.92, 1.33)	0.271	
	BOOST NZ	25 (29.1)	86	32 (35.6)	90	0.82 (0.53, 1.26)	0.361	
	BOOST II UK	69 (38.5)	179	78 (38.4)	203	1.00 (0.78, 1.29)	0.980	
	BOOST II AUS	102 (33.6)	304	95 (29.5)	322	1.14 (0.90, 1.43)	0.276	
	NeOProM	**502 (40.4)**	**1244**	**519 (39.1)**	**1326**	**1.03 (0.94, 1.13)**	**0.563**	
Multiple	SUPPORT	56 (45.9)	122	70 (55.6)	126	0.81 (0.61, 1.08)	0.159	
	COT	62 (39.7)	156	66 (44.3)	149	0.87 (0.71, 1.07)	0.200	
	BOOST NZ	12 (37.5)	32	12 (42.9)	28	0.90 (0.51, 1.58)	0.703	
	BOOST II UK	40 (46.0)	87	35 (41.7)	84	1.15 (0.85, 1.56)	0.352	
	BOOST II AUS	35 (34.0)	103	30 (30.3)	99	1.11 (0.80, 1.56)	0.531	
	NeOProM	**205 (41.0)**	**500**	**213 (43.8)**	**486**	**0.95 (0.83, 1.08)**	**0.443**	
start<6 hrs	SUPPORT	218 (47.2)	462	252 (50.8)	496	0.94 (0.82, 1.07)	0.331	0.193
	COT	6 (27.3)	22	10 (47.6)	21	0.57 (0.25, 1.32)	0.191	
	BOOST NZ	13 (59.1)	22	8 (38.1)	21	1.87 (0.72, 4.85)	0.197	
	BOOST II UK		.		.		.	
	BOOST II AUS	13 (33.3)	39	17 (34.7)	49	0.93 (0.51, 1.69)	0.807	
	NeOProM	**250 (45.9)**	**545**	**287 (48.9)**	**587**	**0.94 (0.83, 1.06)**	**0.320**	
>=6 hrs	SUPPORT	2 (40.0)	5	0	4		***	
	COT	195 (42.6)	458	184 (40.1)	459	1.03 (0.90, 1.19)	0.661	
	BOOST NZ	24 (25.0)	96	36 (37.1)	97	0.68 (0.44, 1.04)	0.073	

eTable 8. Major disability (primary analysis)^, by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	BOOST II UK		.		.		.	
	BOOST II AUS	124 (33.8)	367	108 (29.0)	372	1.17 (0.96, 1.44)	0.120	
	NeOProM	**345 (37.3)**	**926**	**328 (35.2)**	**932**	**1.05 (0.93, 1.17)**	**0.437**	
Original	SUPPORT	223 (47.1)	473	256 (50.6)	506	0.94 (0.82, 1.07)	0.340	0.299
software	COT	91 (40.3)	226	90 (41.7)	216	0.94 (0.76, 1.16)	0.574	
	BOOST NZ	37 (31.4)	118	44 (37.3)	118	0.85 (0.59, 1.20)	0.350	
	BOOST II UK	33 (54.1)	61	24 (38.1)	63	1.45 (0.97, 2.19)	0.073	
	BOOST II AUS	81 (32.0)	253	75 (28.6)	262	1.10 (0.86, 1.41)	0.459	
	NeOProM	**465 (41.1)**	**1131**	**489 (42.0)**	**1165**	**0.98 (0.89, 1.08)**	**0.673**	
Revised	SUPPORT		.		.		.	
software	COT	97 (43.1)	225	85 (37.4)	227	1.10 (0.89, 1.36)	0.357	
	BOOST NZ		.		.		.	
	BOOST II UK	76 (37.1)	205	89 (39.7)	224	0.95 (0.76, 1.19)	0.684	
	BOOST II AUS	56 (36.4)	154	50 (31.4)	159	1.19 (0.88, 1.61)	0.264	
	NeOProM	**229 (39.2)**	**584**	**224 (36.7)**	**610**	**1.06 (0.93, 1.22)**	**0.368**	
SGA:	SUPPORT	214 (46.8)	457	231 (49.4)	468	0.95 (0.83, 1.09)	0.452	0.896
Trialist	COT	182 (41.3)	441	176 (39.6)	445	1.01 (0.87, 1.18)	0.851	
defined -	BOOST II NZ	29 (28.2)	103	41 (37.3)	110	0.76 (0.53, 1.09)	0.137	
No	BOOST II UK	94 (41.4)	227	96 (38.9)	247	1.09 (0.89, 1.35)	0.405	
	BOOST II AUS	114 (32.0)	356	104 (28.7)	362	1.12 (0.91, 1.38)	0.281	
	NeOProM	**633 (40.0)**	**1584**	**648 (39.7)**	**1632**	**1.00 (0.92, 1.09)**	**0.950**	
Yes	SUPPORT	9 (56.3)	16	25 (65.8)	38	0.86 (0.53, 1.41)	0.558	
	COT	19 (48.7)	39	18 (51.4)	35	0.95 (0.60, 1.49)	0.811	
	BOOST II NZ	8 (53.3)	15	3 (37.5)	8	1.28 (0.47, 3.47)	0.626	
	BOOST II UK	15 (39.5)	38	16 (41.0)	39	1.15 (0.78, 1.71)	0.479	
	BOOST II AUS	23 (45.1)	51	21 (35.6)	59	1.27 (0.80, 2.00)	0.311	
	NeOProM	**74 (46.5)**	**159**	**83 (46.4)**	**179**	**1.02 (0.81, 1.28)**	**0.877**	
SGA:	SUPPORT	189 (45.8)	413	207 (48.5)	427	0.95 (0.81, 1.10)	0.455	0.999
NeOProM	COT	182 (41.3)	441	176 (39.6)	445	1.01 (0.87, 1.18)	0.851	
defined -	BOOST II NZ	29 (28.2)	103	41 (37.3)	110	0.76 (0.53, 1.09)	0.137	
No	BOOST II UK	99 (41.4)	239	103 (39.5)	261	1.08 (0.88, 1.32)	0.482	
	BOOST II AUS	114 (32.0)	356	104 (28.7)	362	1.12 (0.91, 1.38)	0.281	
	NeOProM	**613 (39.5)**	**1552**	**631 (39.3)**	**1605**	**1.00 (0.92, 1.09)**	**0.974**	
Yes	SUPPORT	34 (56.7)	60	49 (62.0)	79	0.91 (0.68, 1.22)	0.538	
	COT	19 (48.7)	39	18 (51.4)	35	0.95 (0.60, 1.49)	0.811	
	BOOST II NZ	8 (53.3)	15	3 (37.5)	8	1.28 (0.47, 3.47)	0.626	
	BOOST II UK	10 (37.0)	27	10 (38.5)	26	1.21 (0.73, 2.02)	0.455	
	BOOST II AUS	23 (45.1)	51	21 (35.6)	59	1.27 (0.80, 2.00)	0.311	
	NeOProM	**94 (49.0)**	**192**	**101 (48.8)**	**207**	**1.02 (0.83, 1.25)**	**0.852**	

^ **Primary outcome as pre-specified in published NeOProM protocol**: composite outcome of death or major disability by 18-24 months' age, corrected for prematurity. Major disability is any of the following: Bayley-III Developmental Assessment cognitive score <85 and/or language score <85; severe visual loss; cerebral palsy with Gross Motor Function Classification System (GMFCS) level 2 or higher at 18-24 months' age, corrected for prematurity; or deafness requiring hearing aids.

*Analysis adjusted for trial and multiple births

Abbreviations/definitions

CI: confidence interval; RR: relative risk; GA: gestational age; SUPPORT: Surfactant Positive Airway Pressure and Pulse Oximetry Trial; COT: Canadian Oxygen Trial; BOOST: Benefits of Oxygen Saturation Targeting; NZ: New Zealand; UK: United Kingdom; AUS: Australia; NeOProM: Neonatal Oxygenation Prospective Meta-analysis; inborn: born inside the treating center; outborn: born outside the treating center (e.g. transferred from another hospital; vaginal: mode of delivery through the vagina; Caesarean: mode of delivery via surgical procedure; ANS: antenatal corticosteroids; singleton: child born as a single birth; multiple: more than one child per birth; start<6 hrs: intervention commenced less than 6 hours after birth; start>=6 hrs: intervention commenced greater than or equal to 6 hours after birth; original software: original oximeter software; revised software: revised oximeter software; SGA: small for gestational age; SGA NeOProM defined: small for gestational age as per definition used by NeOProM collaboration, i.e. less than 10th percentile using charts from Kramer et al.[1]

The subgroup analysis by oximeter software type (original vs revised) excludes n=74 infants in COT who were exposed to both the original and revised software.

Empty cells (.) indicate data not collected or not applicable in this trial.

*** Low / no event rate(s) makes parameter not estimable.

eTable 9. Major disability (supportive analysis)[#], by subgroups

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
GA<26 wks	SUPPORT	87 (51.2)	170	118 (59.6)	198	0.86 (0.71, 1.04)	0.119	0.363
	COT	87 (46.5)	187	84 (45.9)	183	1.00 (0.81, 1.22)	0.978	
	BOOST NZ	17 (33.3)	51	19 (33.3)	57	1.55 (0.84, 2.86)	0.165	
	BOOST II UK	51 (41.5)	123	57 (39.3)	145	1.06 (0.79, 1.42)	0.702	
	BOOST II AUS	63 (38.0)	166	63 (36.0)	175	1.04 (0.80, 1.35)	0.769	
	NeOProM	**305 (43.8)**	**697**	**341 (45.0)**	**758**	**0.97 (0.87, 1.08)**	**0.598**	
GA>=26 wks	SUPPORT	137 (45.1)	304	138 (44.8)	308	1.02 (0.85, 1.22)	0.857	
	COT	114 (38.8)	294	111 (37.2)	298	1.01 (0.83, 1.22)	0.954	
	BOOST NZ	23 (25.3)	91	29 (34.5)	84	0.68 (0.43, 1.06)	0.086	
	BOOST II UK	72 (31.6)	228	65 (28.9)	225	1.15 (0.88, 1.50)	0.300	
	BOOST II AUS	83 (29.7)	279	67 (24.1)	278	1.25 (0.96, 1.62)	0.104	
	NeOProM	**429 (35.9)**	**1196**	**410 (34.4)**	**1193**	**1.04 (0.94, 1.15)**	**0.462**	
Inborn	SUPPORT	224 (47.3)	474	256 (50.6)	506	0.94 (0.82, 1.07)	0.357	0.304
	COT	186 (41.6)	447	179 (40.8)	439	0.99 (0.86, 1.15)	0.935	
	BOOST NZ	38 (28.6)	133	47 (35.6)	132	0.81 (0.58, 1.14)	0.231	
	BOOST II UK	110 (35.4)	311	108 (33.1)	326	1.10 (0.89, 1.35)	0.378	
	BOOST II AUS	136 (33.0)	412	125 (29.3)	427	1.12 (0.93, 1.36)	0.243	
	NeOProM	**694 (39.1)**	**1777**	**715 (39.1)**	**1830**	**1.00 (0.92, 1.08)**	**0.931**	
Outborn	SUPPORT		.		.		.	
	COT	15 (44.1)	34	16 (38.1)	42	1.16 (0.67, 1.99)	0.556	
	BOOST NZ	2 (22.2)	9	1 (11.1)	9	1.95 (0.21, 18.2)	0.556	
	BOOST II UK	13 (32.5)	40	14 (31.8)	44	1.06 (0.54, 2.10)	0.863	
	BOOST II AUS	10 (30.3)	33	5 (19.2)	26	1.55 (0.60, 4.03)	0.367	
	NeOProM	**40 (34.5)**	**116**	**36 (29.8)**	**121**	**1.21 (0.85, 1.72)**	**0.301**	
Vaginal	SUPPORT	59 (40.4)	146	79 (45.4)	174	0.88 (0.68, 1.14)	0.347	0.351
	COT	84 (47.2)	178	73 (37.6)	194	1.25 (0.99, 1.58)	0.059	
	BOOST NZ	16 (26.7)	60	22 (34.4)	64	1.57 (0.66, 3.75)	0.311	
	BOOST II UK	69 (34.8)	198	72 (33.0)	218	1.07 (0.82, 1.40)	0.607	
	BOOST II AUS	69 (33.0)	209	62 (30.8)	201	1.06 (0.80, 1.41)	0.677	
	NeOProM	**297 (37.5)**	**791**	**308 (36.2)**	**851**	**1.05 (0.93, 1.19)**	**0.418**	
Caesarean	SUPPORT	165 (50.3)	328	177 (53.3)	332	0.95 (0.82, 1.11)	0.518	
	COT	117 (38.6)	303	121 (42.3)	286	0.89 (0.75, 1.05)	0.168	
	BOOST NZ	24 (29.3)	82	26 (33.8)	77	0.85 (0.55, 1.32)	0.483	
	BOOST II UK	54 (35.3)	153	50 (32.9)	152	1.11 (0.83, 1.48)	0.495	
	BOOST II AUS	75 (32.1)	234	67 (26.9)	249	1.19 (0.93, 1.54)	0.169	
	NeOProM	**435 (39.5)**	**1100**	**441 (40.2)**	**1096**	**0.98 (0.89, 1.07)**	**0.615**	
ANS - No	SUPPORT	7 (41.2)	17	12 (50.0)	24	0.79 (0.39, 1.58)	0.500	0.546
	COT	25 (54.3)	46	27 (62.8)	43	0.68 (0.32, 1.44)	0.313	
	BOOST NZ	5 (31.3)	16	4 (33.3)	12	0.94 (0.32, 2.76)	0.943	
	BOOST II UK	8 (33.3)	24	10 (37.0)	27	1.01 (0.64, 1.61)	0.955	

eTable 9. Major disability (supportive analysis)[#], by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	BOOST II AUS	16 (34.0)	47	9 (31.0)	29	1.07 (0.54, 2.11)	0.845	
	NeOProM	**61 (40.7)**	**150**	**62 (45.9)**	**135**	**0.92 (0.72, 1.18)**	**0.523**	
ANS - Yes	SUPPORT	217 (47.5)	457	244 (50.6)	482	0.95 (0.83, 1.08)	0.430	
	COT	175 (40.3)	434	168 (38.4)	438	1.02 (0.88, 1.19)	0.776	
	BOOST NZ	35 (27.8)	126	44 (34.1)	129	0.82 (0.57, 1.17)	0.272	
	BOOST II UK	115 (35.3)	326	111 (32.6)	341	1.11 (0.90, 1.36)	0.331	
	BOOST II AUS	127 (32.2)	395	121 (28.9)	419	1.10 (0.90, 1.34)	0.340	
	NeOProM	**669 (38.5)**	**1738**	**688 (38.0)**	**1809**	**1.01 (0.93, 1.09)**	**0.858**	
Male	SUPPORT	128 (54.0)	237	159 (57.2)	278	0.95 (0.80, 1.11)	0.497	0.333
	COT	134 (50.4)	266	117 (47.2)	248	1.02 (0.86, 1.21)	0.791	
	BOOST NZ	27 (38.6)	70	33 (42.9)	77	0.90 (0.61, 1.32)	0.595	
	BOOST II UK	72 (39.8)	181	72 (36.4)	198	1.16 (0.88, 1.52)	0.298	
	BOOST II AUS	95 (43.4)	219	78 (34.2)	228	1.29 (1.02, 1.62)	0.031	
	NeOProM	**456 (46.9)**	**973**	**459 (44.6)**	**1029**	**1.04 (0.95, 1.14)**	**0.421**	
Female	SUPPORT	96 (40.5)	237	97 (42.5)	228	0.94 (0.75, 1.17)	0.582	
	COT	67 (31.2)	215	78 (33.5)	233	0.92 (0.71, 1.20)	0.548	
	BOOST NZ	13 (18.1)	72	15 (23.4)	64	0.77 (0.40, 1.49)	0.561	
	BOOST II UK	51 (30.0)	170	50 (29.1)	172	1.04 (0.77, 1.41)	0.804	
	BOOST II AUS	51 (22.6)	226	52 (23.1)	225	0.97 (0.70, 1.35)	0.878	
	NeOProM	**278 (30.2)**	**920**	**292 (31.7)**	**922**	**0.95 (0.84, 1.09)**	**0.471**	
Singleton	SUPPORT	167 (47.6)	351	186 (48.9)	380	0.97 (0.84, 1.13)	0.712	0.397
	COT	139 (42.8)	325	129 (38.9)	332	1.10 (0.92, 1.32)	0.308	
	BOOST NZ	27 (26.0)	104	34 (32.1)	106	0.81 (0.53, 1.24)	0.331	
	BOOST II UK	78 (31.8)	245	84 (31.7)	265	1.00 (0.78, 1.30)	0.973	
	BOOST II AUS	109 (32.7)	333	99 (28.5)	347	1.15 (0.91, 1.44)	0.235	
	NeOProM	**520 (38.3)**	**1358**	**532 (37.2)**	**1430**	**1.03 (0.94, 1.13)**	**0.565**	
Multiple	SUPPORT	57 (46.3)	123	70 (55.6)	126	0.82 (0.62, 1.09)	0.182	
	COT	62 (39.7)	156	66 (44.3)	149	0.87 (0.71, 1.07)	0.200	
	BOOST NZ	13 (34.2)	38	14 (40.0)	35	0.87 (0.53, 1.42)	0.583	
	BOOST II UK	45 (42.5)	106	38 (36.2)	105	1.21 (0.91, 1.62)	0.188	
	BOOST II AUS	37 (33.0)	112	31 (29.2)	106	1.13 (0.81, 1.57)	0.462	
	NeOProM	**214 (40.0)**	**535**	**219 (42.0)**	**521**	**0.96 (0.85, 1.09)**	**0.552**	
start<6 hrs	SUPPORT	219 (47.3)	463	252 (50.8)	496	0.94 (0.82, 1.07)	0.348	0.142
	COT	6 (27.3)	22	10 (47.6)	21	0.57 (0.25, 1.32)	0.191	
	BOOST NZ	13 (52.0)	25	9 (36.0)	25	1.95 (0.65, 5.82)	0.232	
	BOOST II UK		.		.		.	
	BOOST II AUS	13 (29.5)	44	18 (35.3)	51	0.80 (0.44, 1.46)	0.463	
	NeOProM	**251 (45.3)**	**554**	**289 (48.7)**	**593**	**0.93 (0.82, 1.06)**	**0.264**	
>=6 hrs	SUPPORT	2 (40.0)	5	0	4		***	
	COT	195 (42.5)	459	185 (40.2)	460	1.03 (0.89, 1.18)	0.709	
	BOOST NZ	27 (23.1)	117	39 (33.6)	116	0.69 (0.46, 1.03)	0.068	

eTable 9. Major disability (supportive analysis)[#], by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	BOOST II UK		.		.		.	
	BOOST II AUS	132 (33.2)	398	112 (27.9)	402	1.20 (0.99, 1.47)	0.068	
	NeOProM	**356 (36.4)**	**979**	**336 (34.2)**	**982**	**1.05 (0.94, 1.17)**	**0.376**	
Original	SUPPORT	224 (47.3)	474	256 (50.6)	506	0.94 (0.82, 1.07)	0.357	0.286
software	COT	91 (40.3)	226	90 (41.7)	216	0.94 (0.76, 1.16)	0.574	
	BOOST NZ	40 (28.2)	142	48 (34.0)	141	0.83 (0.59, 1.16)	0.282	
	BOOST II UK	39 (45.3)	86	27 (32.9)	82	1.43 (0.95, 2.16)	0.084	
	BOOST II AUS	87 (31.5)	276	76 (27.3)	278	1.14 (0.89, 1.46)	0.296	
	NeOProM	**481 (40.0)**	**1204**	**497 (40.6)**	**1223**	**0.98 (0.89, 1.08)**	**0.697**	
Revised	SUPPORT		.		.		.	
software	COT	97 (42.9)	226	86 (37.7)	228	1.09 (0.89, 1.35)	0.408	
	BOOST NZ		.		.		.	
	BOOST II UK	84 (31.7)	265	95 (33.0)	288	0.99 (0.79, 1.24)	0.910	
	BOOST II AUS	59 (34.9)	169	54 (30.9)	175	1.16 (0.87, 1.55)	0.314	
	NeOProM	**240 (36.4)**	**660**	**235 (34.0)**	**691**	**1.07 (0.93, 1.22)**	**0.332**	
SGA:	SUPPORT	215 (46.9)	458	231 (49.4)	468	0.95 (0.83, 1.09)	0.473	0.990
Trialist	COT	182 (41.3)	441	177 (39.7)	446	1.01 (0.87, 1.17)	0.882	
defined -	BOOST II NZ	32 (25.4)	126	44 (33.3)	132	0.76 (0.54, 1.07)	0.115	
No	BOOST II UK	104 (35.0)	297	103 (32.5)	317	1.11 (0.90, 1.38)	0.333	
	BOOST II AUS	122 (31.2)	391	109 (27.7)	394	1.14 (0.93, 1.40)	0.215	
	NeOProM	**655 (38.2)**	**1713**	**664 (37.8)**	**1757**	**1.01 (0.93, 1.09)**	**0.858**	
Yes	SUPPORT	9 (56.3)	16	25 (65.8)	38	0.86 (0.53, 1.41)	0.558	
	COT	19 (47.5)	40	18 (51.4)	35	0.92 (0.58, 1.46)	0.726	
	BOOST II NZ	8 (50.0)	16	4 (44.4)	9	1.01 (0.43, 2.36)	0.989	
	BOOST II UK	19 (35.8)	53	18 (34.6)	52	1.40 (0.96, 2.04)	0.085	
	BOOST II AUS	23 (43.4)	53	21 (35.6)	59	1.22 (0.77, 1.93)	0.399	
	NeOProM	**78 (43.8)**	**178**	**86 (44.6)**	**193**	**1.00 (0.80, 1.26)**	**0.984**	
SGA:	SUPPORT	190 (45.9)	414	207 (48.5)	427	0.95 (0.82, 1.10)	0.477	0.886
NeOProM	COT	182 (41.3)	441	177 (39.7)	446	1.01 (0.87, 1.17)	0.882	
defined -	BOOST II NZ	32 (25.4)	126	44 (33.3)	132	0.76 (0.54, 1.07)	0.115	
No	BOOST II UK	109 (35.0)	311	110 (32.9)	334	1.10 (0.89, 1.35)	0.382	
	BOOST II AUS	122 (31.2)	391	109 (27.7)	394	1.14 (0.93, 1.40)	0.215	
	NeOProM	**635 (37.7)**	**1683**	**647 (37.3)**	**1733**	**1.01 (0.93, 1.09)**	**0.870**	
Yes	SUPPORT	34 (56.7)	60	49 (62.0)	79	0.91 (0.68, 1.22)	0.538	
	COT	19 (47.5)	40	18 (51.4)	35	0.92 (0.58, 1.46)	0.726	
	BOOST II NZ	8 (50.0)	16	4 (44.4)	9	1.01 (0.43, 2.36)	0.989	
	BOOST II UK	14 (35.0)	40	12 (33.3)	36	1.41 (0.88, 2.28)	0.154	
	BOOST II AUS	23 (43.4)	53	21 (35.6)	59	1.22 (0.77, 1.93)	0.399	
	NeOProM	**98 (46.9)**	**209**	**104 (47.7)**	**218**	**1.02 (0.83, 1.24)**	**0.863**	

Supportive analysis of primary outcome: including using alternative sources of information for classifying major disability as used within individual trials. This may have included a Bayley-II Mental Developmental Index (MDI) score <70, or another validated assessment tool (e.g. Griffiths test), or a paediatrician assessment, or parent-reported measure of neurodevelopmental impairment (e.g. able to speak less than 5-10 words) or other measures.

*Analysis adjusted for trial and multiple births

Abbreviations/definitions

CI: confidence interval; RR: relative risk; GA: gestational age; SUPPORT: Surfactant Positive Airway Pressure and Pulse Oximetry Trial; COT: Canadian Oxygen Trial; BOOST: Benefits of Oxygen Saturation Targeting; NZ: New Zealand; UK: United Kingdom; AUS: Australia; NeOProM: Neonatal Oxygenation Prospective Meta-analysis; inborn: born inside the treating center; outborn: born outside the treating center (e.g. transferred from another hospital; vaginal: mode of delivery through the vagina; Caesarean: mode of delivery via surgical procedure; ANS: antenatal corticosteroids; singleton: child born as a single birth; multiple: more than one child per birth; start<6 hrs: intervention commenced less than 6 hours after birth; start>=6 hrs: intervention commenced greater than or equal to 6 hours after birth; original software: original oximeter software; revised software: revised oximeter software; SGA: small for gestational age; SGA NeOProM defined: small for gestational age as per definition used by NeOProM collaboration, i.e. less than 10th percentile using charts from Kramer et al.[1]

The subgroup analysis by oximeter software type (original vs revised) excludes n=74 infants in COT who were exposed to both the original and revised software.

Empty cells (.) indicate data not collected or not applicable in this trial.

*** Low / no event rate(s) makes parameter not estimable.

eTable 10. Major disability (secondary analysis)[+], by subgroups

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
GA<26 wks	SUPPORT	35 (20.6)	170	60 (30.3)	198	0.66 (0.45, 0.96)	0.030	0.132
	COT	39 (21.7)	180	41 (23.2)	177	0.91 (0.62, 1.32)	0.617	
	BOOST NZ	2 (4.9)	41	5 (11.4)	44	0.44 (0.10, 1.97)	0.280	
	BOOST II UK	30 (32.3)	93	35 (33.7)	104	0.96 (0.64, 1.44)	0.839	
	BOOST II AUS	28 (18.3)	153	27 (16.2)	167	1.13 (0.71, 1.81)	0.601	
	NeOProM	**134 (21.0)**	**637**	**168 (24.3)**	**690**	**0.86 (0.71, 1.05)**	**0.142**	
GA>=26 wks	SUPPORT	42 (13.9)	303	44 (14.3)	308	0.95 (0.63, 1.43)	0.812	
	COT	44 (15.8)	279	38 (13.3)	286	1.09 (0.72, 1.66)	0.679	
	BOOST NZ	8 (10.4)	77	7 (9.9)	71	1.16 (0.46, 2.97)	0.751	
	BOOST II UK	42 (24.4)	172	38 (21.0)	181	1.18 (0.80, 1.75)	0.401	
	BOOST II AUS	30 (11.9)	252	30 (11.9)	252	1.11 (0.69, 1.79)	0.676	
	NeOProM	**166 (15.3)**	**1083**	**157 (14.3)**	**1098**	**1.07 (0.87, 1.32)**	**0.496**	
Inborn	SUPPORT	77 (16.3)	473	104 (20.6)	506	0.77 (0.59, 1.02)	0.071	0.939
	COT	74 (17.3)	427	72 (17.0)	423	0.96 (0.71, 1.30)	0.795	
	BOOST NZ	9 (8.1)	111	12 (10.9)	110	0.77 (0.34, 1.75)	0.534	
	BOOST II UK	66 (27.8)	237	60 (23.9)	251	1.17 (0.86, 1.59)	0.312	
	BOOST II AUS	55 (14.6)	376	56 (14.1)	398	1.08 (0.77, 1.52)	0.658	
	NeOProM	**281 (17.3)**	**1624**	**304 (18.0)**	**1688**	**0.96 (0.83, 1.12)**	**0.621**	
Outborn	SUPPORT		.		.		.	
	COT	9 (28.1)	32	7 (17.5)	40	1.33 (0.87, 2.05)	0.192	
	BOOST NZ	1 (14.3)	7	0	5		***	
	BOOST II UK	6 (21.4)	28	13 (38.2)	34	0.55 (0.26, 1.18)	0.124	
	BOOST II AUS	3 (10.3)	29	1 (4.8)	21	2.11 (0.27, 16.4)	0.477	
	NeOProM	**19 (19.8)**	**96**	**21 (21.0)**	**100**	**0.97 (0.59, 1.60)**	**0.906**	
Vaginal	SUPPORT	19 (13.0)	146	36 (20.7)	174	0.55 (0.32, 0.95)	0.031	0.606
	COT	32 (18.8)	170	34 (17.7)	192	1.06 (0.69, 1.64)	0.788	
	BOOST NZ	4 (8.2)	49	4 (7.7)	52	1.06 (0.29, 3.82)	0.933	
	BOOST II UK	40 (25.8)	155	44 (26.7)	165	0.97 (0.66, 1.40)	0.854	
	BOOST II AUS	27 (14.4)	188	26 (14.0)	186	1.03 (0.62, 1.70)	0.921	
	NeOProM	**122 (17.2)**	**708**	**144 (18.7)**	**769**	**0.92 (0.74, 1.14)**	**0.445**	
Caesarean	SUPPORT	58 (17.7)	327	68 (20.5)	332	0.86 (0.62, 1.20)	0.378	
	COT	51 (17.6)	289	45 (16.7)	270	0.97 (0.67, 1.41)	0.880	
	BOOST NZ	6 (8.7)	69	8 (12.7)	63	0.78 (0.30, 2.06)	0.618	
	BOOST II UK	32 (29.1)	110	29 (24.2)	120	1.20 (0.79, 1.84)	0.388	
	BOOST II AUS	30 (13.9)	216	30 (13.0)	231	1.11 (0.71, 1.75)	0.639	
	NeOProM	**177 (17.5)**	**1011**	**180 (17.7)**	**1016**	**0.99 (0.82, 1.20)**	**0.938**	
ANS - No	SUPPORT	3 (17.6)	17	5 (20.8)	24	0.93 (0.24, 3.59)	0.912	0.640
	COT	15 (32.6)	46	16 (39.0)	41	0.83 (0.46, 1.49)	0.535	
	BOOST NZ	0	12	0	10		***	
	BOOST II UK	5 (25.0)	20	5 (25.0)	20	1.00 (0.34, 2.93)	0.599	

eTable 10. Major disability (secondary analysis)[+], by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	BOOST II AUS	5 (12.5)	40	5 (18.5)	27	0.64 (0.20, 2.03)	0.448	
	NeOProM	**28 (20.7)**	**135**	**31 (25.4)**	**122**	**0.84 (0.54, 1.28)**	**0.83**	
ANS - Yes	SUPPORT	74 (16.2)	456	99 (20.5)	482	0.78 (0.59, 1.03)	0.081	
	COT	68 (16.5)	412	63 (14.9)	422	1.02 (0.74, 1.40)	0.892	
	BOOST NZ	10 (9.5)	105	12 (11.4)	105	0.86 (0.39, 1.90)	0.718	
	BOOST II UK	67 (27.5)	244	67 (25.5)	263	1.08 (0.80, 1.45)	0.611	
	BOOST II AUS	53 (14.6)	363	52 (13.4)	388	1.13 (0.79, 1.60)	0.508	
	NeOProM	**272 (17.2)**	**1580**	**293 (17.7)**	**1660**	**0.97 (0.84, 1.13)**	**0.727**	
Male	SUPPORT	46 (19.4)	237	66 (23.7)	278	0.81 (0.57, 1.14)	0.228	0.529
	COT	63 (24.5)	257	53 (22.3)	238	1.04 (0.75, 1.45)	0.813	
	BOOST NZ	6 (10.0)	60	9 (15.0)	60	0.73 (0.29, 1.87)	0.514	
	BOOST II UK	41 (30.6)	134	44 (30.1)	146	1.02 (0.71, 1.46)	0.927	
	BOOST II AUS	41 (20.5)	200	35 (16.7)	210	1.31 (0.85, 2.01)	0.223	
	NeOProM	**197 (22.2)**	**888**	**207 (22.2)**	**932**	**0.98 (0.83, 1.17)**	**0.857**	
Female	SUPPORT	31 (13.1)	236	38 (16.7)	228	0.75 (0.47, 1.18)	0.216	
	COT	20 (9.9)	202	26 (11.6)	225	0.85 (0.49, 1.47)	0.555	
	BOOST NZ	4 (6.9)	58	3 (5.5)	55	1.30 (0.30, 5.58)	0.725	
	BOOST II UK	31 (23.7)	131	29 (20.9)	139	1.14 (0.73, 1.79)	0.568	
	BOOST II AUS	17 (8.3)	205	22 (10.5)	209	0.79 (0.43, 1.44)	0.438	
	NeOProM	**103 (12.4)**	**832**	**118 (13.8)**	**856**	**0.90 (0.70, 1.16)**	**0.418**	
Singleton	SUPPORT	53 (15.1)	351	81 (21.3)	380	0.71 (0.52, 0.97)	0.032	0.967
	COT	56 (17.9)	312	47 (14.6)	323	1.23 (0.86, 1.76)	0.247	
	BOOST NZ	6 (7.0)	86	11 (12.4)	89	0.56 (0.22, 1.46)	0.238	
	BOOST II UK	44 (24.7)	178	48 (23.9)	201	1.04 (0.73, 1.48)	0.849	
	BOOST II AUS	45 (14.9)	303	41 (12.8)	320	1.16 (0.78, 1.72)	0.461	
	NeOProM	**204 (16.6)**	**1230**	**228 (17.4)**	**1313**	**0.96 (0.81, 1.14)**	**0.642**	
Multiple	SUPPORT	24 (19.7)	122	23 (18.3)	126	1.10 (0.61, 1.98)	0.756	
	COT	27 (18.4)	147	32 (22.9)	140	0.72 (0.47, 1.12)	0.150	
	BOOST NZ	4 (12.5)	32	1 (3.8)	26	4.04 (0.42, 38.6)	0.226	
	BOOST II UK	28 (32.2)	87	25 (29.8)	84	1.10 (0.69, 1.74)	0.698	
	BOOST II AUS	13 (12.7)	102	16 (16.2)	99	0.92 (0.49, 1.74)	0.802	
	NeOProM	**96 (19.6)**	**490**	**97 (20.4)**	**475**	**0.95 (0.74, 1.23)**	**0.712**	
start<6 hrs	SUPPORT	75 (16.2)	462	102 (20.6)	496	0.77 (0.58, 1.02)	0.069	0.044
	COT	3 (14.3)	21	5 (25.0)	20	0.58 (0.16, 2.08)	0.405	
	BOOST NZ	5 (22.7)	22	3 (15.0)	20	1.67 (0.46, 6.10)	0.436	
	BOOST II UK		.		.		.	
	BOOST II AUS	4 (10.3)	39	11 (22.4)	49	0.46 (0.16, 1.35)	0.156	
	NeOProM	**87 (16.0)**	**544**	**121 (20.7)**	**585**	**0.75 (0.57, 0.97)**	**0.030**	
>=6 hrs	SUPPORT	1 (20.0)	5	0	4		***	
	COT	80 (18.3)	438	74 (16.7)	443	1.03 (0.77, 1.38)	0.829	
	BOOST NZ	5 (5.2)	96	9 (9.5)	95	0.57 (0.20, 1.63)	0.294	

eTable 10. Major disability (secondary analysis)[+], by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	BOOST II UK		.		.		.	
	BOOST II AUS	54 (14.8)	365	46 (12.4)	370	1.28 (0.89, 1.83)	0.181	
	NeOProM	**140 (15.5)**	**904**	**129 (14.1)**	**912**	**1.07 (0.86, 1.34)**	**0.518**	
Original	SUPPORT	77 (16.3)	473	104 (20.6)	506	0.77 (0.59, 1.02)	0.071	0.898
software	COT	42 (19.4)	217	35 (16.4)	213	1.14 (0.77, 1.70)	0.503	
	BOOST NZ	10 (8.5)	118	12 (10.4)	115	0.84 (0.38, 1.86)	0.668	
	BOOST II UK	21 (34.4)	61	16 (25.4)	63	1.35 (0.75, 2.40)	0.314	
	BOOST II AUS	36 (14.3)	251	31 (11.9)	260	1.23 (0.78, 1.92)	0.375	
	NeOProM	**186 (16.6)**	**1120**	**198 (17.1)**	**1157**	**0.97 (0.81, 1.17)**	**0.762**	
Revised	SUPPORT		.		.		.	
software	COT	38 (17.7)	215	34 (16.0)	213	1.02 (0.66, 1.58)	0.916	
	BOOST NZ		.		.		.	
	BOOST II UK	51 (25.0)	204	57 (25.7)	222	0.98 (0.70, 1.35)	0.887	
	BOOST II AUS	22 (14.3)	154	26 (16.4)	159	0.94 (0.57, 1.55)	0.808	
	NeOProM	**111 (19.4)**	**573**	**117 (19.7)**	**594**	**0.99 (0.78, 1.25)**	**0.935**	
SGA:	SUPPORT	71 (15.5)	457	87 (18.6)	468	0.81 (0.60, 1.09)	0.170	0.123
Trialist	COT	77 (18.3)	420	72 (16.7)	430	1.04 (0.78, 1.39)	0.782	
defined -	BOOST II NZ	6 (5.8)	103	10 (9.3)	107	0.63 (0.24, 1.65)	0.347	
No	BOOST II UK	63 (27.9)	226	62 (25.3)	245	1.11 (0.82, 1.50)	0.509	
	BOOST II AUS	52 (14.7)	354	44 (12.2)	360	1.23 (0.85, 1.79)	0.274	
	NeOProM	**269 (17.2)**	**1560**	**275 (17.1)**	**1610**	**1.00 (0.86, 1.17)**	**0.973**	
Yes	SUPPORT	6 (37.5)	16	17 (44.7)	38	0.82 (0.40, 1.69)	0.587	
	COT	6 (15.4)	39	7 (21.2)	33	0.81 (0.51, 1.28)	0.365	
	BOOST II NZ	4 (26.7)	15	2 (25.0)	8	1.00 (0.23, 4.35)	0.999	
	BOOST II UK	9 (23.7)	38	10 (25.6)	39	1.56 (0.83, 2.91)	0.167	
	BOOST II AUS	6 (11.8)	51	13 (22.0)	59	0.53 (0.22, 1.30)	0.168	
	NeOProM	**31 (19.5)**	**159**	**49 (27.7)**	**177**	**0.80 (0.54, 1.19)**	**0.271**	
SGA:	SUPPORT	58 (14.0)	413	80 (18.7)	427	0.75 (0.54, 1.03)	0.077	0.430
NeOProM	COT	77 (18.3)	420	72 (16.7)	430	1.04 (0.78, 1.39)	0.782	
defined -	BOOST II NZ	6 (5.8)	103	10 (9.3)	107	0.63 (0.24, 1.65)	0.347	
No	BOOST II UK	66 (27.7)	238	67 (25.9)	259	1.07 (0.80, 1.44)	0.637	
	BOOST II AUS	52 (14.7)	354	44 (12.2)	360	1.23 (0.85, 1.79)	0.274	
	NeOProM	**259 (17.0)**	**1528**	**273 (17.2)**	**1583**	**0.98 (0.84, 1.15)**	**0.835**	
Yes	SUPPORT	19 (31.7)	60	24 (30.4)	79	0.95 (0.56, 1.60)	0.840	
	COT	6 (15.4)	39	7 (21.2)	33	0.81 (0.51, 1.28)	0.365	
	BOOST II NZ	4 (26.7)	15	2 (25.0)	8	1.00 (0.23, 4.35)	0.999	
	BOOST II UK	6 (22.2)	27	6 (23.1)	26	1.71 (0.78, 3.76)	0.181	
	BOOST II AUS	6 (11.8)	51	13 (22.0)	59	0.53 (0.22, 1.30)	0.168	
	NeOProM	**41 (21.4)**	**192**	**52 (25.4)**	**205**	**0.86 (0.60, 1.23)**	**0.410**	

+ **Secondary analysis:** composite outcome of death or major disability by 18-24 months' age, corrected for prematurity. Major disability is any of the following: Bayley-III Developmental Assessment cognitive score <70 and/or language score <70; severe visual loss; cerebral palsy with Gross Motor Function Classification System (GMFCS) level 2 or higher at 18-24 months' age, corrected for prematurity; or deafness requiring hearing aids.

*Analysis adjusted for trial and multiple births

Abbreviations/definitions

CI: confidence interval; RR: relative risk; GA: gestational age; SUPPORT: Surfactant Positive Airway Pressure and Pulse Oximetry Trial; COT: Canadian Oxygen Trial; BOOST: Benefits of Oxygen Saturation Targeting; NZ: New Zealand; UK: United Kingdom; AUS: Australia; NeOProM: Neonatal Oxygenation Prospective Meta-analysis; inborn: born inside the treating center; outborn: born outside the treating center (e.g. transferred from another hospital; vaginal: mode of delivery through the vagina; Caesarean: mode of delivery via surgical procedure; ANS: antenatal corticosteroids; singleton: child born as a single birth; multiple: more than one child per birth; start<6 hrs: intervention commenced less than 6 hours after birth; start>=6 hrs: intervention commenced greater than or equal to 6 hours after birth; original software: original oximeter software; revised software: revised oximeter software; SGA: small for gestational age; SGA NeOProM defined: small for gestational age as per definition used by NeOProM collaboration, i.e. less than 10th percentile using charts from Kramer et al.[1]

The subgroup analysis by oximeter software type (original vs revised) excludes n=74 infants in COT who were exposed to both the original and revised software.

Empty cells (.) indicate data not collected or not applicable in this trial.

*** Low / no event rate(s) makes parameter not estimable.

eTable 11. Major disability (trialist defined)˜, by subgroups

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
GA<26 wks	SUPPORT	24 (14.1)	170	33 (16.8)	197	0.81 (0.49, 1.34)	0.417	0.706
	COT	87 (46.5)	187	84 (45.9)	183	1.00 (0.81, 1.22)	0.978	
	BOOST NZ	17 (33.3)	51	20 (35.1)	57	1.40 (0.80, 2.44)	0.234	
	BOOST II UK	51 (41.5)	123	57 (39.3)	145	1.06 (0.79, 1.42)	0.702	
	BOOST II AUS	64 (38.3)	167	63 (35.4)	178	1.06 (0.82, 1.38)	0.651	
	NeOProM	**243 (34.8)**	**698**	**257 (33.8)**	**760**	**1.02 (0.89, 1.16)**	**0.785**	
GA>=26 wks	SUPPORT	21 (7.0)	302	20 (6.5)	307	1.03 (0.56, 1.91)	0.920	
	COT	114 (38.8)	294	111 (37.2)	298	1.01 (0.83, 1.22)	0.954	
	BOOST NZ	23 (25.3)	91	29 (34.5)	84	0.68 (0.43, 1.06)	0.086	
	BOOST II UK	72 (31.6)	228	65 (28.9)	225	1.15 (0.88, 1.50)	0.300	
	BOOST II AUS	83 (29.4)	282	67 (23.9)	280	1.24 (0.95, 1.61)	0.109	
	NeOProM	**313 (26.1)**	**1197**	**292 (24.5)**	**1194**	**1.05 (0.93, 1.19)**	**0.449**	
Inborn	SUPPORT	45 (9.5)	472	53 (10.5)	504	0.88 (0.59, 1.30)	0.515	0.399
	COT	186 (41.6)	447	179 (40.8)	439	0.99 (0.86, 1.15)	0.935	
	BOOST NZ	38 (28.6)	133	48 (36.4)	132	0.80 (0.57, 1.12)	0.188	
	BOOST II UK	110 (35.4)	311	108 (33.1)	326	1.10 (0.89, 1.35)	0.378	
	BOOST II AUS	137 (33.0)	415	125 (28.9)	432	1.13 (0.93, 1.37)	0.204	
	NeOProM	**516 (29.0)**	**1778**	**513 (28.0)**	**1833**	**1.02 (0.93, 1.12)**	**0.665**	
Outborn	SUPPORT		.		.		.	
	COT	15 (44.1)	34	16 (38.1)	42	1.16 (0.67, 1.99)	0.556	
	BOOST NZ	2 (22.2)	9	1 (11.1)	9	1.95 (0.21, 18.2)	0.556	
	BOOST II UK	13 (32.5)	40	14 (31.8)	44	1.06 (0.54, 2.10)	0.863	
	BOOST II AUS	10 (29.4)	34	5 (19.2)	26	1.50 (0.58, 3.91)	0.402	
	NeOProM	**40 (34.2)**	**117**	**36 (29.8)**	**121**	**1.20 (0.84, 1.71)**	**0.316**	
Vaginal	SUPPORT	10 (6.9)	145	19 (11.0)	173	0.54 (0.25, 1.17)	0.118	0.331
	COT	84 (47.2)	178	73 (37.6)	194	1.25 (0.99, 1.58)	0.059	
	BOOST NZ	16 (26.7)	60	22 (34.4)	64	1.57 (0.66, 3.75)	0.311	
	BOOST II UK	69 (34.8)	198	72 (33.0)	218	1.07 (0.82, 1.40)	0.607	
	BOOST II AUS	70 (33.0)	212	62 (30.4)	204	1.07 (0.81, 1.42)	0.616	
	NeOProM	**249 (31.4)**	**793**	**248 (29.1)**	**853**	**1.09 (0.95, 1.25)**	**0.221**	
Caesarean	SUPPORT	35 (10.7)	327	34 (10.3)	331	1.03 (0.65, 1.64)	0.888	
	COT	117 (38.6)	303	121 (42.3)	286	0.89 (0.75, 1.05)	0.168	
	BOOST NZ	24 (29.3)	82	27 (35.1)	77	0.83 (0.54, 1.27)	0.386	
	BOOST II UK	54 (35.3)	153	50 (32.9)	152	1.11 (0.83, 1.48)	0.495	
	BOOST II AUS	75 (31.9)	235	67 (26.7)	251	1.20 (0.93, 1.54)	0.161	
	NeOProM	**305 (27.7)**	**1100**	**299 (27.3)**	**1097**	**0.99 (0.88, 1.12)**	**0.931**	
ANS - No	SUPPORT	2 (11.8)	17	0	24		***	0.614
	COT	25 (54.3)	46	27 (62.8)	43	0.68 (0.32, 1.44)	0.313	
	BOOST NZ	5 (31.3)	16	4 (33.3)	12	0.94 (0.32, 2.76)	0.943	
	BOOST II UK	8 (33.3)	24	10 (37.0)	27	1.01 (0.64, 1.61)	0.955	

eTable 11. Major disability (trialist defined)˜, by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	BOOST II AUS	16 (32.7)	49	9 (31.0)	29	1.02 (0.52, 2.03)	0.947	
	NeOProM	**56 (36.8)**	**152**	**50 (37.0)**	**135**	**0.94 (0.73, 1.23)**	**0.665**	
ANS - Yes	SUPPORT	43 (9.5)	455	53 (11.0)	480	0.84 (0.57, 1.25)	0.394	
	COT	175 (40.3)	434	168 (38.4)	438	1.02 (0.88, 1.19)	0.776	
	BOOST NZ	35 (27.8)	126	45 (34.9)	129	0.80 (0.56, 1.14)	0.223	
	BOOST II UK	115 (35.3)	326	111 (32.6)	341	1.11 (0.90, 1.36)	0.331	
	BOOST II AUS	128 (32.2)	397	121 (28.5)	424	1.11 (0.92, 1.35)	0.280	
	NeOProM	**496 (28.5)**	**1738**	**498 (27.5)**	**1812**	**1.03 (0.94, 1.14)**	**0.532**	
Male	SUPPORT	25 (10.5)	237	33 (11.9)	278	0.88 (0.54, 1.45)	0.620	0.258
	COT	134 (50.4)	266	117 (47.2)	248	1.02 (0.86, 1.21)	0.791	
	BOOST NZ	27 (38.6)	70	33 (42.9)	77	0.90 (0.61, 1.32)	0.595	
	BOOST II UK	72 (39.8)	181	72 (36.4)	198	1.16 (0.88, 1.52)	0.298	
	BOOST II AUS	95 (42.6)	223	78 (33.8)	231	1.28 (1.02, 1.61)	0.036	
	NeOProM	**353 (36.1)**	**977**	**333 (32.3)**	**1032**	**1.08 (0.96, 1.21)**	**0.186**	
Female	SUPPORT	20 (8.5)	235	20 (8.8)	226	0.88 (0.47, 1.65)	0.698	
	COT	67 (31.2)	215	78 (33.5)	233	0.92 (0.71, 1.20)	0.548	
	BOOST NZ	13 (18.1)	72	16 (25.0)	64	0.72 (0.38, 1.38)	0.439	
	BOOST II UK	51 (30.0)	170	50 (29.1)	172	1.04 (0.77, 1.41)	0.804	
	BOOST II AUS	52 (23.0)	226	52 (22.9)	227	1.00 (0.72, 1.39)	0.990	
	NeOProM	**203 (22.1)**	**918**	**216 (23.4)**	**922**	**0.96 (0.82, 1.12)**	**0.589**	
Singleton	SUPPORT	28 (8.0)	350	42 (11.1)	378	0.72 (0.46, 1.14)	0.158	0.835
	COT	139 (42.8)	325	129 (38.9)	332	1.10 (0.92, 1.32)	0.308	
	BOOST NZ	27 (26.0)	104	35 (33.0)	106	0.79 (0.52, 1.20)	0.265	
	BOOST II UK	78 (31.8)	245	84 (31.7)	265	1.00 (0.78, 1.30)	0.973	
	BOOST II AUS	110 (32.7)	336	99 (28.2)	351	1.16 (0.93, 1.46)	0.197	
	NeOProM	**382 (28.1)**	**1360**	**389 (27.2)**	**1432**	**1.04 (0.93, 1.16)**	**0.525**	
Multiple	SUPPORT	17 (13.9)	122	11 (8.7)	126	1.67 (0.77, 3.66)	0.197	
	COT	62 (39.7)	156	66 (44.3)	149	0.87 (0.71, 1.07)	0.200	
	BOOST NZ	13 (34.2)	38	14 (40.0)	35	0.87 (0.53, 1.42)	0.583	
	BOOST II UK	45 (42.5)	106	38 (36.2)	105	1.21 (0.91, 1.62)	0.188	
	BOOST II AUS	37 (32.7)	113	31 (29.0)	107	1.13 (0.81, 1.56)	0.475	
	NeOProM	**174 (32.5)**	**535**	**160 (30.7)**	**522**	**1.02 (0.89, 1.18)**	**0.771**	
start<6 hrs	SUPPORT	44 (9.5)	461	52 (10.5)	494	0.88 (0.59, 1.30)	0.512	0.222
	COT	6 (27.3)	22	10 (47.6)	21	0.57 (0.25, 1.32)	0.191	
	BOOST NZ	13 (52.0)	25	9 (36.0)	25	1.95 (0.65, 5.82)	0.232	
	BOOST II UK		.		.		.	
	BOOST II AUS	13 (29.5)	44	18 (34.6)	52	0.81 (0.45, 1.49)	0.507	
	NeOProM	**76 (13.8)**	**552**	**89 (15.0)**	**592**	**0.89 (0.67, 1.17)**	**0.395**	
>=6 hrs	SUPPORT	0	5	0	4		***	
	COT	195 (42.5)	459	185 (40.2)	460	1.03 (0.89, 1.18)	0.709	
	BOOST NZ	27 (23.1)	117	40 (34.5)	116	0.67 (0.45, 1.00)	0.051	

eTable 11. Major disability (trialist defined)˜, by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	BOOST II UK		.		.		.	
	BOOST II AUS	133 (33.1)	402	112 (27.6)	406	1.21 (0.99, 1.47)	0.060	
	NeOProM	**355 (36.1)**	**983**	**337 (34.2)**	**986**	**1.06 (0.94, 1.19)**	**0.360**	
Original	SUPPORT	45 (9.5)	472	53 (10.5)	504	0.88 (0.59, 1.30)	0.515	0.551
software	COT	91 (40.3)	226	90 (41.7)	216	0.94 (0.76, 1.16)	0.574	
	BOOST NZ	40 (28.2)	142	49 (34.8)	141	0.82 (0.59, 1.14)	0.233	
	BOOST II UK	39 (45.3)	86	27 (32.9)	82	1.43 (0.95, 2.16)	0.084	
	BOOST II AUS	88 (31.7)	278	76 (27.0)	282	1.16 (0.91, 1.48)	0.235	
	NeOProM	**303 (25.2)**	**1204**	**295 (24.1)**	**1225**	**1.01 (0.89, 1.15)**	**0.828**	
Revised	SUPPORT		.		.		.	
software	COT	97 (42.9)	226	86 (37.7)	228	1.09 (0.89, 1.35)	0.408	
	BOOST NZ		.		.		.	
	BOOST II UK	84 (31.7)	265	95 (33.0)	288	0.99 (0.79, 1.24)	0.910	
	BOOST II AUS	59 (34.5)	171	54 (30.7)	176	1.15 (0.86, 1.54)	0.345	
	NeOProM	**240 (36.3)**	**662**	**235 (34.0)**	**692**	**1.07 (0.93, 1.22)**	**0.347**	
SGA:	SUPPORT	40 (8.8)	456	44 (9.4)	466	0.90 (0.59, 1.37)	0.612	0.943
Trialist	COT	182 (41.3)	441	177 (39.7)	446	1.01 (0.87, 1.17)	0.882	
defined -	BOOST II NZ	32 (25.4)	126	45 (34.1)	132	0.74 (0.53, 1.05)	0.090	
No	BOOST II UK	104 (35.0)	297	103 (32.5)	317	1.11 (0.90, 1.38)	0.333	
	BOOST II AUS	123 (31.2)	394	109 (27.4)	398	1.15 (0.94, 1.41)	0.185	
	NeOProM	**481 (28.1)**	**1714**	**478 (27.2)**	**1759**	**1.03 (0.94, 1.14)**	**0.531**	
Yes	SUPPORT	5 (31.3)	16	9 (23.7)	38	1.30 (0.52, 3.29)	0.575	
	COT	19 (47.5)	40	18 (51.4)	35	0.92 (0.58, 1.46)	0.726	
	BOOST II NZ	8 (50.0)	16	4 (44.4)	9	1.01 (0.43, 2.36)	0.989	
	BOOST II UK	19 (35.8)	53	18 (34.6)	52	1.40 (0.96, 2.04)	0.085	
	BOOST II AUS	23 (42.6)	54	21 (35.0)	60	1.22 (0.77, 1.93)	0.406	
	NeOProM	**74 (41.3)**	**179**	**70 (36.1)**	**194**	**1.07 (0.83, 1.39)**	**0.581**	
SGA:	SUPPORT	35 (8.5)	412	40 (9.4)	425	0.89 (0.57, 1.39)	0.597	0.938
NeOProM	COT	182 (41.3)	441	177 (39.7)	446	1.01 (0.87, 1.17)	0.882	
defined -	BOOST II NZ	32 (25.4)	126	45 (34.1)	132	0.74 (0.53, 1.05)	0.090	
No	BOOST II UK	109 (35.0)	311	110 (32.9)	334	1.10 (0.89, 1.35)	0.382	
	BOOST II AUS	123 (31.2)	394	109 (27.4)	398	1.15 (0.94, 1.41)	0.185	
	NeOProM	**481 (28.6)**	**1684**	**481 (27.7)**	**1735**	**1.03 (0.93, 1.13)**	**0.573**	
Yes	SUPPORT	10 (16.7)	60	13 (16.5)	79	1.01 (0.48, 2.15)	0.979	
	COT	19 (47.5)	40	18 (51.4)	35	0.92 (0.58, 1.46)	0.726	
	BOOST II NZ	8 (50.0)	16	4 (44.4)	9	1.01 (0.43, 2.36)	0.989	
	BOOST II UK	14 (35.0)	40	12 (33.3)	36	1.41 (0.88, 2.28)	0.154	
	BOOST II AUS	23 (42.6)	54	21 (35.0)	60	1.22 (0.77, 1.93)	0.406	
	NeOProM	**74 (35.2)**	**210**	**68 (31.1)**	**219**	**1.04 (0.81, 1.35)**	**0.743**	

~ Trialist defined analysis: primary outcome as defined by trialists - includes alternative measures of disability as described in 'supportive analysis of primary outcome'

*Analysis adjusted for trial and multiple births

Abbreviations/definitions

CI: confidence interval; RR: relative risk; GA: gestational age; SUPPORT: Surfactant Positive Airway Pressure and Pulse Oximetry Trial; COT: Canadian Oxygen Trial; BOOST: Benefits of Oxygen Saturation Targeting; NZ: New Zealand; UK: United Kingdom; AUS: Australia; NeOProM: Neonatal Oxygenation Prospective Meta-analysis; inborn: born inside the treating center; outborn: born outside the treating center (e.g. transferred from another hospital; vaginal: mode of delivery through the vagina; Caesarean: mode of delivery via surgical procedure; ANS: antenatal corticosteroids; singleton: child born as a single birth; multiple: more than one child per birth; start<6 hrs: intervention commenced less than 6 hours after birth; start>=6 hrs: intervention commenced greater than or equal to 6 hours after birth; original software: original oximeter software; revised software: revised oximeter software; SGA: small for gestational age; SGA NeOProM defined: small for gestational age as per definition used by NeOProM collaboration, i.e. less than 10th percentile using charts from Kramer et al.[1]

The subgroup analysis by oximeter software type (original vs revised) excludes n=74 infants in COT who were exposed to both the original and revised software.

Empty cells (.) indicate data not collected or not applicable in this trial.

*** Low / no event rate(s) makes parameter not estimable.

eTable 12. Cerebral palsy with GMFCS ≥ 2[$], by subgroups

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
GA<26 wks	SUPPORT	10 (5.8)	173	12 (6.0)	200	1.00 (0.44, 2.23)	0.993	0.679
	COT	17 (9.0)	189	16 (8.7)	184	1.07 (0.56, 2.06)	0.831	
	BOOST NZ	2 (3.9)	51	2 (3.5)	57	1.08 (0.16, 7.36)	0.934	
	BOOST II UK	14 (11.3)	124	7 (4.9)	144	2.17 (0.92, 5.13)	0.076	
	BOOST II AUS	7 (4.2)	167	13 (7.3)	178	0.57 (0.23, 1.40)	0.218	
	NeOProM	**50 (7.1)**	**704**	**50 (6.6)**	**763**	**1.08 (0.74, 1.58)**	**0.673**	
GA>=26 wks	SUPPORT	10 (3.3)	306	8 (2.6)	311	1.14 (0.44, 2.94)	0.786	
	COT	13 (4.3)	299	15 (4.9)	304	0.92 (0.45, 1.88)	0.821	
	BOOST NZ	3 (3.2)	93	5 (6.0)	84	0.56 (0.14, 2.26)	0.415	
	BOOST II UK	21 (9.2)	229	17 (7.5)	226	1.26 (0.67, 2.39)	0.473	
	BOOST II AUS	9 (3.2)	279	12 (4.3)	278	0.85 (0.34, 2.13)	0.734	
	NeOProM	**56 (4.6)**	**1206**	**57 (4.7)**	**1203**	**0.97 (0.66, 1.41)**	**0.863**	
Inborn	SUPPORT	20 (4.2)	479	20 (3.9)	511	1.01 (0.55, 1.88)	0.967	0.144
	COT	24 (5.3)	454	29 (6.5)	445	0.85 (0.50, 1.42)	0.528	
	BOOST NZ	4 (3.0)	134	7 (5.3)	131	0.57 (0.17, 1.91)	0.362	
	BOOST II UK	32 (10.2)	313	20 (6.2)	324	1.68 (0.98, 2.90)	0.061	
	BOOST II AUS	15 (3.6)	412	25 (5.8)	430	0.65 (0.34, 1.24)	0.190	
	NeOProM	**95 (5.3)**	**1792**	**101 (5.5)**	**1841**	**0.97 (0.73, 1.27)**	**0.802**	
Outborn	SUPPORT		.		.		.	
	COT	6 (17.6)	34	2 (4.7)	43	3.68 (0.86, 15.6)	0.078	
	BOOST NZ	1 (10.0)	10	0	10		***	
	BOOST II UK	3 (7.5)	40	4 (8.7)	46	0.85 (0.20, 3.57)	0.828	
	BOOST II AUS	1 (2.9)	34	0	26		***	
	NeOProM	**11 (9.3)**	**118**	**6 (4.8)**	**125**	**2.14 (0.84, 5.47)**	**0.111**	
Vaginal	SUPPORT	7 (4.8)	147	6 (3.4)	176	1.48 (0.51, 4.30)	0.467	0.994
	COT	12 (6.6)	181	12 (6.1)	196	1.08 (0.50, 2.36)	0.840	
	BOOST NZ	3 (5.0)	60	4 (6.3)	64	0.78 (0.18, 3.37)	0.744	
	BOOST II UK	16 (8.0)	199	11 (5.0)	218	1.58 (0.75, 3.32)	0.229	
	BOOST II AUS	6 (2.9)	210	14 (6.9)	203	0.43 (0.15, 1.23)	0.117	
	NeOProM	**44 (5.5)**	**797**	**47 (5.5)**	**857**	**1.02 (0.68, 1.53)**	**0.940**	
Caesarean	SUPPORT	13 (3.9)	332	14 (4.2)	335	0.85 (0.40, 1.83)	0.685	
	COT	18 (5.9)	307	19 (6.5)	291	0.95 (0.51, 1.76)	0.860	
	BOOST NZ	2 (2.4)	84	3 (3.9)	77	0.65 (0.11, 3.83)	0.636	
	BOOST II UK	19 (12.3)	154	13 (8.6)	152	1.41 (0.74, 2.68)	0.292	
	BOOST II AUS	10 (4.3)	234	11 (4.4)	250	0.96 (0.41, 2.23)	0.925	
	NeOProM	**62 (5.6)**	**1111**	**60 (5.4)**	**1105**	**1.03 (0.73, 1.45)**	**0.876**	
ANS - No	SUPPORT	2 (11.8)	17	0	24		***	0.941
	COT	9 (19.6)	46	8 (18.6)	43	1.05 (0.45, 2.44)	0.908	
	BOOST NZ	0	16	0	12		***	

eTable 12. Cerebral palsy with GMFCS ≥ 2[$], by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	BOOST II UK	3 (12.0)	25	3 (11.1)	27	0.97 (0.21, 4.41)	0.972	
	BOOST II AUS	3 (6.3)	48	4 (13.8)	29	0.41 (0.10, 1.71)	0.222	
	NeOProM	**17 (11.2)**	**152**	**15 (11.1)**	**135**	**1.01 (0.76, 1.34)**	**0.970**	
ANS - Yes	SUPPORT	18 (3.9)	462	20 (4.1)	487	0.96 (0.52, 1.78)	0.896	
	COT	21 (4.8)	441	23 (5.2)	445	0.97 (0.55, 1.71)	0.916	
	BOOST NZ	5 (3.9)	128	7 (5.4)	129	0.73 (0.24, 2.24)	0.582	
	BOOST II UK	32 (9.8)	327	21 (6.2)	341	1.62 (0.94, 2.76)	0.080	
	BOOST II AUS	13 (3.3)	395	21 (5.0)	422	0.69 (0.34, 1.39)	0.302	
	NeOProM	**89 (5.1)**	**1753**	**92 (5.0)**	**1824**	**1.01 (0.76, 1.34)**	**0.948**	
Male	SUPPORT	11 (4.6)	240	12 (4.3)	282	1.09 (0.49, 2.41)	0.840	0.862
	COT	22 (8.2)	269	21 (8.3)	252	1.04 (0.59, 1.84)	0.883	
	BOOST NZ	4 (5.6)	72	6 (7.8)	77	0.75 (0.22, 2.55)	0.649	
	BOOST II UK	19 (10.4)	182	13 (6.6)	198	1.69 (0.84, 3.39)	0.144	
	BOOST II AUS	9 (4.1)	220	16 (6.9)	231	0.63 (0.28, 1.45)	0.281	
	NeOProM	**65 (6.6)**	**983**	**68 (6.5)**	**1040**	**0.99 (0.71, 1.39)**	**0.972**	
Female	SUPPORT	9 (3.8)	239	8 (3.5)	229	0.81 (0.30, 2.16)	0.673	
	COT	8 (3.7)	219	10 (4.2)	236	0.87 (0.35, 2.16)	0.762	
	BOOST NZ	1 (1.4)	72	1 (1.6)	64	0.89 (0.06, 13.8)	0.933	
	BOOST II UK	16 (9.4)	171	11 (6.4)	172	1.44 (0.70, 2.96)	0.325	
	BOOST II AUS	7 (3.1)	226	9 (4.0)	225	0.77 (0.29, 2.04)	0.602	
	NeOProM	**41 (4.4)**	**927**	**39 (4.2)**	**926**	**1.05 (0.68, 1.63)**	**0.826**	
Singleton	SUPPORT	10 (2.8)	355	18 (4.7)	383	0.60 (0.28, 1.28)	0.186	0.130
	COT	17 (5.2)	328	19 (5.6)	338	0.92 (0.49, 1.74)	0.803	
	BOOST NZ	3 (2.9)	105	7 (6.6)	106	0.43 (0.11, 1.63)	0.215	
	BOOST II UK	20 (8.1)	247	13 (4.9)	264	1.64 (0.84, 3.23)	0.150	
	BOOST II AUS	10 (3.0)	334	16 (4.6)	349	0.65 (0.30, 1.42)	0.282	
	NeOProM	**60 (4.4)**	**1369**	**73 (5.1)**	**1440**	**0.87 (0.62, 1.21)**	**0.404**	
Multiple	SUPPORT	10 (8.1)	124	2 (1.6)	128	5.24 (1.17, 23.5)	0.030	
	COT	13 (8.1)	160	12 (8.0)	150	1.10 (0.51, 2.36)	0.814	
	BOOST NZ	2 (5.1)	39	0	35		***	
	BOOST II UK	15 (14.2)	106	11 (10.4)	106	1.37 (0.66, 2.82)	0.398	
	BOOST II AUS	6 (5.4)	112	9 (8.4)	107	0.69 (0.25, 1.92)	0.475	
	NeOProM	**46 (8.5)**	**541**	**34 (6.5)**	**526**	**1.30 (0.84, 2.02)**	**0.235**	
start<6 hrs	SUPPORT	19 (4.1)	468	20 (4.0)	501	0.96 (0.51, 1.80)	0.896	0.699
	COT	2 (8.7)	23	1 (4.8)	21	1.83 (0.18, 18.4)	0.607	
	BOOST NZ	2 (8.0)	25	2 (8.0)	25	1.01 (0.17, 6.07)	0.990	
	BOOST II UK		.		.		.	
	BOOST II AUS	2 (4.5)	44	5 (9.6)	52	0.51 (0.11, 2.29)	0.380	
	NeOProM	**25 (4.5)**	**560**	**28 (4.7)**	**599**	**0.90 (0.53, 1.54)**	**0.704**	
>=6 hrs	SUPPORT	0	5	0	4		***	

eTable 12. Cerebral palsy with GMFCS ≥ 2[$], by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	COT	28 (6.0)	465	30 (6.4)	467	0.98 (0.60, 1.60)	0.922	
	BOOST NZ	3 (2.5)	119	5 (4.3)	116	0.61 (0.15, 2.49)	0.494	
	BOOST II UK		.		.		.	
	BOOST II AUS	14 (3.5)	399	20 (5.0)	404	0.78 (0.39, 1.54)	0.470	
	NeOProM	**45 (4.6)**	**988**	**55 (5.5)**	**991**	**0.82 (0.56, 1.21)**	**0.320**	
Original	SUPPORT	20 (4.2)	479	20 (3.9)	511	1.01 (0.55, 1.88)	0.967	0.800
software	COT	17 (7.3)	232	13 (5.9)	219	1.28 (0.64, 2.57)	0.486	
	BOOST NZ	5 (3.5)	144	7 (5.0)	141	0.71 (0.23, 2.18)	0.548	
	BOOST II UK	10 (11.4)	88	7 (8.4)	83	1.48 (0.53, 4.09)	0.454	
	BOOST II AUS	11 (4.0)	277	15 (5.3)	283	0.74 (0.35, 1.56)	0.424	
	NeOProM	**63 (5.2)**	**1220**	**62 (5.0)**	**1237**	**1.02 (0.72, 1.44)**	**0.925**	
Revised	SUPPORT		.		.		.	
software	COT	12 (5.3)	227	14 (6.0)	232	0.90 (0.43, 1.89)	0.790	
	BOOST NZ		.		.		.	
	BOOST II UK	25 (9.4)	265	17 (5.9)	287	1.59 (0.89, 2.85)	0.116	
	BOOST II AUS	5 (3.0)	169	10 (5.8)	173	0.60 (0.26, 1.39)	0.233	
	NeOProM	**42 (6.4)**	**661**	**41 (5.9)**	**692**	**1.09 (0.72, 1.67)**	**0.683**	
SGA:	SUPPORT	20 (4.3)	462	17 (3.6)	473	1.15 (0.60, 2.18)	0.677	0.385
Trialist	COT	28 (6.3)	448	28 (6.2)	451	1.05 (0.63, 1.73)	0.857	
defined -	BOOST II NZ	4 (3.1)	128	7 (5.3)	132	0.61 (0.18, 2.03)	0.420	
No	BOOST II UK	30 (10.0)	299	21 (6.6)	317	1.55 (0.90, 2.66)	0.116	
	BOOST II AUS	16 (4.1)	391	21 (5.3)	397	0.80 (0.42, 1.55)	0.515	
	NeOProM	**98 (5.7)**	**1728**	**94 (5.3)**	**1770**	**1.07 (0.81, 1.41)**	**0.649**	
Yes	SUPPORT	0	17	3 (7.9)	38		***	
	COT	2 (5.0)	40	3 (8.1)	37	0.62 (0.11, 3.44)	0.582	
	BOOST II NZ	1 (6.3)	16	0	9		***	
	BOOST II UK	5 (9.4)	53	2 (3.8)	52	2.45 (0.50, 12.08)	0.642	
	BOOST II AUS	0	54	4 (6.8)	59		***	
	NeOProM	**8 (4.4)**	**180**	**12 (6.2)**	**195**	**0.74 (0.32, 1.71)**	**0.480**	
SGA:	SUPPORT	18 (4.3)	418	17 (3.9)	432	1.04 (0.54, 2.01)	0.915	0.468
NeOProM	COT	28 (6.3)	448	28 (6.2)	451	1.05 (0.63, 1.73)	0.857	
defined -	BOOST II NZ	4 (3.1)	128	7 (5.3)	132	0.61 (0.18, 2.03)	0.420	
No	BOOST II UK	32 (10.2)	313	23 (6.9)	334	1.51 (0.90, 2.53)	0.119	
	BOOST II AUS	16 (4.1)	391	21 (5.3)	397	0.80 (0.42, 1.55)	0.515	
	NeOProM	**98 (5.8)**	**1698**	**96 (5.5)**	**1746**	**1.05 (0.80, 1.39)**	**0.727**	
Yes	SUPPORT	2 (3.3)	61	3 (3.8)	79	0.86 (0.15, 5.01)	0.869	
	COT	2 (5.0)	40	3 (8.1)	37	0.62 (0.11, 3.44)	0.582	
	BOOST II NZ	1 (6.3)	16	0	9		***	
	BOOST II UK	3 (7.5)	40	1 (2.8)	36	2.70 (0.29, 24.81)	0.681	
	BOOST II AUS	0	54	4 (6.8)	59		***	
	NeOProM	**8 (3.8)**	**211**	**11 (5.0)**	**220**	**0.76 (0.32, 1.83)**	**0.543**	

[$] Includes infants with cerebral palsy where Gross Motor Function Classification System (GMFCS) was unknown

* Analysis adjusted for trials and multiple births

Abbreviations/definitions

CI: confidence interval; RR: relative risk; GA: gestational age; SUPPORT: Surfactant Positive Airway Pressure and Pulse Oximetry Trial; COT: Canadian Oxygen Trial; BOOST: Benefits of Oxygen Saturation Targeting; NZ: New Zealand; UK: United Kingdom; AUS: Australia; NeOProM: Neonatal Oxygenation Prospective Meta-analysis; inborn: born inside the treating center; outborn: born outside the treating center (e.g. transferred from another hospital; vaginal: mode of delivery through the vagina; Caesarean: mode of delivery via surgical procedure; ANS: antenatal corticosteroids; singleton: child born as a single birth; multiple: more than one child per birth; start<6 hrs: intervention commenced less than 6 hours after birth; start>=6 hrs: intervention commenced greater than or equal to 6 hours after birth; original software: original oximeter software; revised software: revised oximeter software; SGA: small for gestational age; SGA NeOProM defined: small for gestational age as per definition used by NeOProM collaboration, i.e. less than 10th percentile using charts from Kramer et al.[1]

The subgroup analysis by oximeter software type (original vs revised) excludes n=74 infants in COT who were exposed to both the original and revised software.

Empty cells (.) indicate data not collected or not applicable in this trial.

*** Low / no event rate(s) makes parameter not estimable.

eTable 13. Severe visual impairment (trialist defined), by subgroups

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
GA<26 wks	SUPPORT	1 (0.6)	173	3 (1.5)	200	0.39 (0.04, 3.67)	0.407	0.925
	COT	4 (2.1)	189	2 (1.1)	184	1.95 (0.36, 10.50)	0.586	
	BOOST NZ	0	51	1 (1.8)	56		***	
	BOOST II UK	6 (4.9)	123	6 (4.2)	144	1.16 (0.40, 3.40)	0.781	
	BOOST II AUS	2 (1.2)	169	0	178		***	
	NeOProM	**13 (1.8)**	**705**	**12 (1.6)**	**762**	**1.13 (0.46, 2.74)**	**0.793**	
GA>=26 wks	SUPPORT	4 (1.3)	306	3 (1.0)	311	1.36 (0.31, 6.00)	0.684	
	COT	1 (0.3)	298	1 (0.3)	304	1.02 (0.06, 16.2)	0.989	
	BOOST NZ	0	92	0	84		***	
	BOOST II UK	6 (2.7)	226	5 (2.2)	225	1.39 (0.24, 7.92)	0.711	
	BOOST II AUS	1 (0.4)	283	2 (0.7)	281	0.50 (0.05, 5.51)	0.572	
	NeOProM	**12 (1.0)**	**1205**	**11 (0.9)**	**1205**	**1.10 (0.49, 2.46)**	**0.832**	
Inborn	SUPPORT	5 (1.0)	479	6 (1.2)	511	0.89 (0.28, 2.90)	0.851	***
	COT	5 (1.1)	453	3 (0.7)	445	1.12 (0.56, 2.24)	0.752	
	BOOST NZ	0	133	1 (0.8)	130		***	
	BOOST II UK	12 (3.9)	309	9 (2.8)	324	1.45 (0.55, 3.83)	0.451	
	BOOST II AUS	3 (0.7)	417	2 (0.5)	433	1.56 (0.26, 9.24)	0.626	
	NeOProM	**25 (1.4)**	**1791**	**21 (1.1)**	**1843**	**1.24 (0.66, 2.31)**	**0.504**	
Outborn	SUPPORT		.		.		.	
	COT	0	34	0	43		***	
	BOOST NZ	0	10	0	10		***	
	BOOST II UK	0	40	2 (4.4)	45		***	
	BOOST II AUS	0	35	0	26		***	
	NeOProM	**0**	**119**	**2 (1.6)**	**124**		***	
Vaginal	SUPPORT	1 (0.7)	147	1 (0.6)	176	1.20 (0.08, 19.0)	0.898	0.782
	COT	2 (1.1)	180	0	196		***	
	BOOST NZ	0	60	0	63		***	
	BOOST II UK	7 (3.5)	198	8 (3.7)	217	0.97 (0.36, 2.61)	0.946	
	BOOST II AUS	0	214	1 (0.5)	204		***	
	NeOProM	**10 (1.3)**	**799**	**10 (1.2)**	**856**	**1.09 (0.48, 2.48)**	**0.843**	
Caesarean	SUPPORT	4 (1.2)	332	5 (1.5)	335	0.81 (0.22, 2.99)	0.756	
	COT	3 (1.0)	307	3 (1.0)	291	0.99 (0.98, 1.00)	0.097	
	BOOST NZ	0	83	1 (1.3)	77		***	
	BOOST II UK	5 (3.3)	151	3 (2.0)	152	1.54 (0.43, 5.54)	0.511	
	BOOST II AUS	3 (1.3)	236	1 (0.4)	252	3.20 (0.34, 30.4)	0.311	
	NeOProM	**15 (1.4)**	**1109**	**13 (1.2)**	**1107**	**1.19 (0.52, 2.68)**	**0.683**	
ANS - No	SUPPORT	0	17	0	24		***	***
	COT	0	46	0	43		***	
	BOOST NZ	0	16	0	12		***	

eTable 13. Severe visual impairment (trialist defined), by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	BOOST II UK	0	25	0	28		***	
	BOOST II AUS	0	50	0	29		***	
	NeOProM	**0**	**154**	**0**	**136**		***	
ANS - Yes	SUPPORT	5 (1.1)	462	6 (1.2)	487	0.88 (0.27, 2.86)	0.830	
	COT	5 (1.1)	440	3 (0.7)	445	1.15 (0.55, 2.38)	0.707	
	BOOST NZ	0	127	1 (0.8)	128		***	
	BOOST II UK	12 (3.7)	323	11 (3.2)	339	1.16 (0.46, 2.92)	0.750	
	BOOST II AUS	3 (0.8)	399	2 (0.5)	425	1.60 (0.27, 9.48)	0.606	
	NeOProM	**25 (1.4)**	**1751**	**23 (1.3)**	**1824**	**1.13 (0.61, 2.09)**	**0.703**	
Male	SUPPORT	1 (0.4)	240	4 (1.4)	282	0.31 (0.03, 2.70)	0.286	0.076
	COT	5 (1.9)	269	2 (0.8)	252	2.34 (0.46, 11.96)	0.598	
	BOOST NZ	0	71	0	77		***	
	BOOST II UK	10 (5.6)	180	5 (2.5)	197	2.42 (0.56, 10.5)	0.237	
	BOOST II AUS	3 (1.3)	224	1 (0.4)	231	3.12 (0.32, 30.1)	0.324	
	NeOProM	**19 (1.9)**	**984**	**12 (1.2)**	**1039**	**1.69 (0.82, 3.47)**	0.161	
Female	SUPPORT	4 (1.7)	239	2 (0.9)	229	1.92 (0.36, 10.4)	0.447	
	COT	0	218	1 (0.4)	236		***	
	BOOST NZ	0	72	1 (1.6)	63		***	
	BOOST II UK	2 (1.2)	169	6 (3.5)	172	0.34 (0.07, 1.64)	0.180	
	BOOST II AUS	0	228	1 (0.4)	228		***	
	NeOProM	**6 (0.6)**	**926**	**11 (1.2)**	**928**	**0.54 (0.20, 1.45)**	**0.222**	
Singleton	SUPPORT	3 (0.8)	355	5 (1.3)	383	0.65 (0.16, 2.69)	0.549	0.134
	COT	1 (0.3)	327	3 (0.9)	338	0.34 (0.04, 3.30)	0.355	
	BOOST NZ	0	105	1 (1.0)	104		***	
	BOOST II UK	7 (2.9)	244	6 (2.3)	264	1.26 (0.43, 3.70)	0.671	
	BOOST II AUS	1 (0.3)	338	2 (0.6)	352	0.52 (0.05, 5.72)	0.593	
	NeOProM	**12 (0.9)**	**1369**	**17 (1.2)**	**1441**	**0.76 (0.36, 1.58)**	**0.457**	
Multiple	SUPPORT	2 (1.6)	124	1 (0.8)	128	2.06 (0.19, 22.1)	0.549	
	COT	4 (2.5)	160	0	150		***	
	BOOST NZ	0	38	0	36		***	
	BOOST II UK	5 (4.8)	105	5 (4.8)	105	1.03 (0.24, 4.43)	0.972	
	BOOST II AUS	2 (1.8)	114	0	107		***	
	NeOProM	**13 (2.4)**	**541**	**6 (1.1)**	**526**	**1.97 (0.80, 4.84)**	0.142	
start<6 hrs	SUPPORT	5 (1.1)	468	6 (1.2)	501	0.90 (0.28, 2.91)	0.856	0.351
	COT	0	23	1 (4.8)	21		***	
	BOOST NZ	0	24	0	24		***	
	BOOST II UK		.		.		.	
	BOOST II AUS	0	44	0	52		***	
	NeOProM	**5 (0.9)**	**559**	**7 (1.2)**	**598**	**0.75 (0.26, 2.28)**	**0.63**	
>=6 hrs	SUPPORT	0	5	0	4		***	

eTable 13. Severe visual impairment (trialist defined), by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	COT	5 (1.1)	464	2 (0.4)	467	2.52 (0.49, 12.90)	0.432	
	BOOST NZ	0	119	1 (0.9)	116		***	
	BOOST II UK		.		.		.	
	BOOST II AUS	3 (0.7)	405	2 (0.5)	407	1.51 (0.25, 8.97)	0.653	
	NeOProM	**8 (0.8)**	**993**	**5 (0.5)**	**994**	**1.60 (0.53, 4.48)**	**0.43**	
Original	SUPPORT	5 (1.0)	479	6 (1.2)	511	0.89 (0.28, 2.90)	0.851	0.306
software	COT	3 (1.3)	231	1 (0.5)	219	2.84 (0.30, 27.14)	0.215	
	BOOST NZ	0	143	1 (0.7)	140		***	
	BOOST II UK	4 (4.6)	87	1 (1.3)	80		***	
	BOOST II AUS	2 (0.7)	281	0	284		***	
	NeOProM	**14 (1.1)**	**1221**	**9 (0.7)**	**1234**	**1.65 (0.63, 4.32)**	**0.304**	
Revised	SUPPORT		.		.		.	
software	COT	2 (0.9)	227	2 (0.9)	232	1.03 (0.15, 7.21)	0.980	
	BOOST NZ		.		.		.	
	BOOST II UK	8 (3.1)	262	10 (3.5)	289	0.87 (0.36, 2.13)	0.769	
	BOOST II AUS	1 (0.6)	171	2 (1.1)	175	0.51 (0.05, 5.56)	0.582	
	NeOProM	**11 (1.7)**	**660**	**14 (2.0)**	**696**	**0.85 (0.39, 1.85)**	**0.682**	
SGA:	SUPPORT	4 (0.9)	462	4 (0.8)	473	1.03 (0.26, 4.08)	0.966	0.729
Trialist	COT	5 (1.1)	447	2 (0.4)	451	2.52 (0.49, 12.93)	0.287	
defined -	BOOST II NZ	0	128	1 (0.8)	131		***	
No	BOOST II UK	11 (3.7)	296	11 (3.5)	316	1.00 (0.39, 2.60)	0.999	
	BOOST II AUS	2 (0.5)	397	2 (0.5)	399	1.00 (0.14, 7.06)	0.999	
	NeOProM	**22 (1.3)**	**1730**	**20 (1.1)**	**1770**	**1.07 (0.54, 2.09)**	**0.850**	
Yes	SUPPORT	1 (5.9)	17	2 (5.3)	38	1.11 (0.11, 11.5)	0.927	
	COT	0	40	1 (2.7)	37		***	
	BOOST II NZ	0	15	0	9		***	
	BOOST II UK	1 (1.9)	52	0	52		***	
	BOOST II AUS	1 (1.9)	54	0	60		***	
	NeOProM	**3 (1.7)**	**178**	**3 (1.5)**	**196**	**1.31 (0.35, 4.86)**	**0.690**	
SGA:	SUPPORT	4 (1.0)	418	4 (0.9)	432	1.04 (0.26, 4.12)	0.954	0.767
NeOProM	COT	5 (1.1)	447	2 (0.4)	451	2.52 (0.49, 12.93)	0.287	
defined -	BOOST II NZ	0	128	1 (0.8)	131		***	
No	BOOST II UK	11 (3.5)	310	11 (3.3)	333	1.01 (0.39, 2.62)	0.990	
	BOOST II AUS	2 (0.5)	397	2 (0.5)	399	1.00 (0.14, 7.06)	0.999	
	NeOProM	**22 (1.3)**	**1700**	**20 (1.1)**	**1746**	**1.07 (0.54, 2.11)**	**0.843**	
Yes	SUPPORT	1 (1.6)	61	2 (2.5)	79	0.65 (0.06, 6.98)	0.720	
	COT	0	40	1 (2.7)	37		***	
	BOOST II NZ	0	15	0	9		***	
	BOOST II UK	1 (2.6)	39	0	36		***	
	BOOST II AUS	1 (1.9)	54	0	60		***	
	NeOProM	**3 (1.4)**	**209**	**3 (1.4)**	**221**	**1.08 (0.29, 3.97)**	**0.91**	

* Analysis adjusted for trials and multiple births

Abbreviations/definitions

CI: confidence interval; RR: relative risk; GA: gestational age; SUPPORT: Surfactant Positive Airway Pressure and Pulse Oximetry Trial; COT: Canadian Oxygen Trial; BOOST: Benefits of Oxygen Saturation Targeting; NZ: New Zealand; UK: United Kingdom; AUS: Australia; NeOProM: Neonatal Oxygenation Prospective Meta-analysis; inborn: born inside the treating center; outborn: born outside the treating center (e.g. transferred from another hospital; vaginal: mode of delivery through the vagina; Caesarean: mode of delivery via surgical procedure; ANS: antenatal corticosteroids; singleton: child born as a single birth; multiple: more than one child per birth; start<6 hrs: intervention commenced less than 6 hours after birth; start>=6 hrs: intervention commenced greater than or equal to 6 hours after birth; original software: original oximeter software; revised software: revised oximeter software; SGA: small for gestational age; SGA NeOProM defined: small for gestational age as per definition used by NeOProM collaboration, i.e. less than 10th percentile using charts from Kramer et al.[1]

The subgroup analysis by oximeter software type (original vs revised) excludes n=74 infants in COT who were exposed to both the original and revised software.

Empty cells (.) indicate data not collected or not applicable in this trial.

*** Low / no event rate(s) makes parameter not estimable.

eTable 14. Deafness requiring hearing aids or worse, by subgroups

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
GA<26 wks	SUPPORT	3 (1.7)	173	5 (2.5)	200	0.70 (0.17, 2.88)	0.624	0.110
	COT	12 (6.3)	189	10 (5.4)	185	1.19 (0.52, 2.76)	0.680	
	BOOST NZ	1 (2.0)	51	1 (1.8)	56	1.10 (0.07, 16.7)	0.947	
	BOOST II UK	9 (7.3)	123	19 (13.1)	145	0.59 (0.28, 1.27)	0.177	
	BOOST II AUS	6 (3.6)	166	6 (3.4)	176	1.06 (0.35, 3.23)	0.916	
	NeOProM	**31 (4.4)**	**702**	**41 (5.4)**	**762**	**0.84 (0.54, 1.31)**	**0.441**	
GA>=26 wks	SUPPORT	4 (1.3)	306	1 (0.3)	311	4.07 (0.46, 36.2)	0.209	
	COT	6 (2.0)	298	2 (0.7)	304	3.07 (0.62, 15.1)	0.168	
	BOOST NZ	1 (1.1)	91	0	83		***	
	BOOST II UK	13 (5.7)	229	13 (5.8)	224	1.04 (0.48, 2.28)	0.921	
	BOOST II AUS	5 (1.8)	279	3 (1.1)	275	1.63 (0.39, 6.77)	0.498	
	NeOProM	**29 (2.4)**	**1203**	**19 (1.6)**	**1197**	**1.53 (0.84, 2.78)**	**0.166**	
Inborn	SUPPORT	7 (1.5)	479	6 (1.2)	511	1.24 (0.42, 3.67)	0.692	0.222
	COT	17 (3.8)	453	9 (2.0)	446	1.83 (0.82, 4.09)	0.143	
	BOOST NZ	1 (0.8)	132	1 (0.8)	129	0.98 (0.06, 15.3)	0.987	
	BOOST II UK	18 (5.8)	312	25 (7.7)	323	0.80 (0.44, 1.46)	0.475	
	BOOST II AUS	11 (2.7)	411	8 (1.9)	425	1.42 (0.58, 3.50)	0.447	
	NeOProM	**54 (3.0)**	**1787**	**49 (2.7)**	**1834**	**1.15 (0.78, 1.69)**	**0.474**	
Outborn	SUPPORT		.		.		.	
	COT	1 (2.9)	34	3 (7.0)	43	0.43 (0.05, 3.71)	0.440	
	BOOST NZ	1 (10.0)	10	0	10		***	
	BOOST II UK	4 (10.0)	40	7 (15.2)	46	0.77 (0.42, 1.40)	0.388	
	BOOST II AUS	0	34	1 (3.8)	26		***	
	NeOProM	**6 (5.1)**	**118**	**11 (8.8)**	**125**	**0.64 (0.27, 1.51)**	**0.310**	
Vaginal	SUPPORT	2 (1.4)	147	3 (1.7)	176	0.84 (0.14, 4.94)	0.849	0.063
	COT	6 (3.3)	180	5 (2.5)	197	1.31 (0.41, 4.19)	0.647	
	BOOST NZ	2 (3.4)	60	0	62		***	
	BOOST II UK	13 (6.6)	198	23 (10.5)	219	0.64 (0.33, 1.24)	0.187	
	BOOST II AUS	4 (1.9)	209	7 (3.5)	199	0.55 (0.16, 1.82)	0.325	
	NeOProM	**27 (3.4)**	**794**	**38 (4.5)**	**853**	**0.77 (0.47, 1.24)**	**0.274**	
Caesarean	SUPPORT	5 (1.5)	332	3 (0.9)	335	1.68 (0.41, 6.97)	0.474	
	COT	12 (3.9)	307	7 (2.4)	291	1.55 (0.61, 3.96)	0.358	
	BOOST NZ	0	82	1 (1.3)	77		***	
	BOOST II UK	9 (5.8)	154	9 (6.0)	150	1.05 (0.43, 2.59)	0.915	
	BOOST II AUS	7 (3.0)	234	2 (0.8)	249	3.71 (0.78, 17.7)	0.100	
	NeOProM	**33 (3.0)**	**1109**	**22 (2.0)**	**1102**	**1.51 (0.88, 2.60)**	**0.135**	
ANS - No	SUPPORT	0	17	0	24		***	0.152
	COT	3 (6.5)	46	4 (9.3)	43	0.63 (0.16, 2.46)	0.508	
	BOOST NZ	0	16	0	12		***	

eTable 14. Deafness requiring hearing aids or worse, by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	BOOST II UK	1 (4.0)	25	3 (11.1)	27	1.00 (0.99, 1.00)	0.332	
	BOOST II AUS	1 (2.1)	48	2 (6.9)	29	0.21 (0.04, 1.27)	0.089	
	NeOProM	**5 (3.3)**	**152**	**9 (6.7)**	**135**	**0.49 (0.17, 1.42)**	**0.194**	
ANS - Yes	SUPPORT	7 (1.5)	462	6 (1.2)	487	1.23 (0.42, 3.63)	0.708	
	COT	15 (3.4)	440	8 (1.8)	446	1.80 (0.76, 4.22)	0.179	
	BOOST NZ	2 (1.6)	126	1 (0.8)	127	2.01 (0.19, 21.7)	0.564	
	BOOST II UK	21 (6.4)	326	29 (8.5)	340	0.79 (0.46, 1.36)	0.399	
	BOOST II AUS	10 (2.5)	394	7 (1.7)	417	1.51 (0.58, 3.94)	0.397	
	NeOProM	**55 (3.1)**	**1748**	**51 (2.8)**	**1817**	**1.13 (0.78, 1.64)**	**0.523**	
Male	SUPPORT	2 (0.8)	240	4 (1.4)	282	0.59 (0.11, 3.18)	0.537	0.094
	COT	15 (5.6)	269	7 (2.8)	252	1.98 (0.79, 4.96)	0.143	
	BOOST NZ	1 (1.4)	71	0	77		***	
	BOOST II UK	16 (8.8)	181	21 (10.6)	198	0.97 (0.46, 2.04)	0.943	
	BOOST II AUS	9 (4.1)	218	3 (1.3)	226	3.11 (0.85, 11.3)	0.085	
	NeOProM	**43 (4.4)**	**979**	**35 (3.4)**	**1035**	**1.32 (0.85, 2.06)**	**0.220**	
Female	SUPPORT	5 (2.1)	239	2 (0.9)	229	2.35 (0.46, 11.9)	0.303	
	COT	3 (1.4)	218	5 (2.1)	237	0.65 (0.16, 2.69)	0.556	
	BOOST NZ	1 (1.4)	71	1 (1.6)	62	0.87 (0.06, 13.5)	0.922	
	BOOST II UK	6 (3.5)	171	11 (6.4)	171	0.55 (0.21, 1.43)	0.218	
	BOOST II AUS	2 (0.9)	227	6 (2.7)	225	0.33 (0.07, 1.61)	0.171	
	NeOProM	**17 (1.8)**	**926**	**25 (2.7)**	**924**	**0.68 (0.37, 1.24)**	**0.208**	
Singleton	SUPPORT	5 (1.4)	355	5 (1.3)	383	1.08 (0.31, 3.70)	0.904	0.820
	COT	11 (3.4)	327	8 (2.4)	339	1.43 (0.58, 3.50)	0.439	
	BOOST NZ	2 (1.9)	105	1 (1.0)	103	1.96 (0.18, 21.3)	0.580	
	BOOST II UK	15 (6.1)	247	19 (7.2)	263	0.84 (0.44, 1.62)	0.603	
	BOOST II AUS	8 (2.4)	332	7 (2.0)	346	1.19 (0.44, 3.25)	0.733	
	NeOProM	**41 (3.0)**	**1366**	**40 (2.8)**	**1434**	**1.07 (0.70, 1.64)**	**0.743**	
Multiple	SUPPORT	2 (1.6)	124	1 (0.8)	128	2.06 (0.19, 22.2)	0.553	
	COT	7 (4.4)	160	4 (2.7)	150	1.60 (0.51, 5.03)	0.422	
	BOOST NZ	0	37	0	36		***	
	BOOST II UK	7 (6.7)	105	13 (12.3)	106	0.66 (0.29, 1.51)	0.327	
	BOOST II AUS	3 (2.7)	113	2 (1.9)	105	1.39 (0.23, 8.25)	0.719	
	NeOProM	**19 (3.5)**	**539**	**20 (3.8)**	**525**	**0.91 (0.50, 1.72)**	**0.823**	
start<6 hrs	SUPPORT	7 (1.5)	468	6 (1.2)	501	1.25 (0.42, 3.69)	0.688	0.118
	COT	0	23	2 (9.5)	21		***	
	BOOST NZ	1 (4.3)	23	0	24		***	
	BOOST II UK		.		.		.	
	BOOST II AUS	0	44	3 (6.0)	50		***	
	NeOProM	**8 (1.4)**	**558**	**11 (1.8)**	**596**	**0.76 (0.31, 1.89)**	**0.561**	
>=6 hrs	SUPPORT	0	5	0	4		***	

eTable 14. Deafness requiring hearing aids or worse, by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	COT	18 (3.9)	464	10 (2.1)	468	1.84 (0.88, 3.84)	0.105	
	BOOST NZ	1 (0.8)	119	1 (0.9)	115	0.97 (0.06, 15.1)	0.981	
	BOOST II UK		.		.		.	
	BOOST II AUS	11 (2.8)	398	6 (1.5)	401	1.84 (0.69, 4.95)	0.224	
	NeOProM	**30 (3.0)**	**986**	**17 (1.7)**	**988**	**1.78 (0.99, 3.19)**	**0.062**	
Original	SUPPORT	7 (1.5)	479	6 (1.2)	511	1.24 (0.42, 3.67)	0.692	0.064
software	COT	12 (5.2)	231	7 (3.2)	220	1.62 (0.65, 4.04)	0.299	
	BOOST NZ	2 (1.4)	142	1 (0.7)	139	1.96 (0.18, 21.1)	0.581	
	BOOST II UK	7 (8.0)	88	7 (8.5)	82	1.00 (0.30, 3.36)	0.995	
	BOOST II AUS	8 (2.9)	278	3 (1.1)	276	2.65 (0.71, 9.88)	0.148	
	NeOProM	**36 (3.0)**	**1218**	**24 (2.0)**	**1228**	**1.47 (0.87, 2.48)**	**0.148**	
Revised	SUPPORT		.		.		.	
software	COT	6 (2.6)	227	4 (1.7)	232	1.53 (0.44, 5.39)	0.504	
	BOOST NZ		.		.		.	
	BOOST II UK	15 (5.7)	264	25 (8.7)	287	0.71 (0.39, 1.31)	0.275	
	BOOST II AUS	3 (1.8)	167	6 (3.4)	175	0.52 (0.13, 2.06)	0.352	
	NeOProM	**24 (3.6)**	**658**	**35 (5.0)**	**694**	**0.75 (0.45, 1.25)**	**0.273**	
SGA:	SUPPORT	7 (1.5)	462	6 (1.3)	473	1.19 (0.40, 3.52)	0.748	0.890
Trialist	COT	16 (3.6)	447	10 (2.2)	452	1.62 (0.74, 3.54)	0.231	
defined -	BOOST II NZ	2 (1.6)	128	1 (0.8)	130	2.03 (0.19, 21.9)	0.560	
No	BOOST II UK	18 (6.0)	298	28 (8.9)	316	0.74 (0.42, 1.30)	0.298	
	BOOST II AUS	10 (2.6)	391	8 (2.0)	392	1.25 (0.50, 3.13)	0.637	
	NeOProM	**53 (3.1)**	**1726**	**53 (3.0)**	**1763**	**1.06 (0.73, 1.54)**	**0.775**	
Yes	SUPPORT	0	17	0	38		***	
	COT	2 (5.0)	40	2 (5.4)	37	1.08 (0.25, 4.63)	0.915	
	BOOST II NZ	0	14	0	9		***	
	BOOST II UK	4 (7.5)	53	4 (7.7)	52	0.98 (0.26, 3.73)	0.981	
	BOOST II AUS	1 (1.9)	53	1 (1.7)	59	1.11 (0.07, 17.4)	0.939	
	NeOProM	**7 (4.0)**	**177**	**7 (3.6)**	**195**	**0.98 (0.36, 2.71)**	**0.974**	
SGA:	SUPPORT	7 (1.7)	418	5 (1.2)	432	1.45 (0.46, 4.51)	0.526	0.886
NeOProM	COT	16 (3.6)	447	10 (2.2)	452	1.62 (0.74, 3.54)	0.231	
defined -	BOOST II NZ	2 (1.6)	128	1 (0.8)	130	2.03 (0.19, 21.9)	0.560	
No	BOOST II UK	19 (6.1)	312	30 (9.0)	333	0.72 (0.42, 1.24)	0.232	
	BOOST II AUS	10 (2.6)	391	8 (2.0)	392	1.25 (0.50, 3.13)	0.637	
	NeOProM	**54 (3.2)**	**1696**	**54 (3.1)**	**1739**	**1.06 (0.73, 1.53)**	**0.772**	
Yes	SUPPORT	0	61	1 (1.3)	79		***	
	COT	2 (5.0)	40	2 (5.4)	37	1.08 (0.25, 4.63)	0.915	
	BOOST II NZ	0	14	0	9		***	
	BOOST II UK	3 (7.5)	40	2 (5.6)	36	1.35 (0.24, 7.66)	0.731	
	BOOST II AUS	1 (1.9)	53	1 (1.7)	59	1.11 (0.07, 17.4)	0.939	
	NeOProM	**6 (2.9)**	**208**	**6 (2.7)**	**220**	**1.11 (0.07, 17.36)**	**0.993**	

* Analysis adjusted for trials and multiple births

Abbreviations/definitions

CI: confidence interval; RR: relative risk; GA: gestational age; SUPPORT: Surfactant Positive Airway Pressure and Pulse Oximetry Trial; COT: Canadian Oxygen Trial; BOOST: Benefits of Oxygen Saturation Targeting; NZ: New Zealand; UK: United Kingdom; AUS: Australia; NeOProM: Neonatal Oxygenation Prospective Meta-analysis; inborn: born inside the treating center; outborn: born outside the treating center (e.g. transferred from another hospital; vaginal: mode of delivery through the vagina; Caesarean: mode of delivery via surgical procedure; ANS: antenatal corticosteroids; singleton: child born as a single birth; multiple: more than one child per birth; start<6 hrs: intervention commenced less than 6 hours after birth; start>=6 hrs: intervention commenced greater than or equal to 6 hours after birth; original software: original oximeter software; revised software: revised oximeter software; SGA: small for gestational age; SGA NeOProM defined: small for gestational age as per definition used by NeOProM collaboration, i.e. less than 10th percentile using charts from Kramer et al.[1]

The subgroup analysis by oximeter software type (original vs revised) excludes n=74 infants in COT who were exposed to both the original and revised software.

Empty cells (.) indicate data not collected or not applicable in this trial.

*** Low / no event rate(s) makes parameter not estimable.

eTable 15. Death prior to 18-24 months' age corrected for prematurity, by subgroups

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
GA<26 wks	SUPPORT	91 (34.1)	267	79 (27.9)	283	1.24 (0.95, 1.61)	0.111	0.535
	COT	67 (26.2)	256	64 (25.7)	249	1.02 (0.76, 1.36)	0.885	
	BOOST NZ	21 (29.2)	72	15 (20.8)	72	1.38 (0.81, 2.36)	0.240	
	BOOST II UK	85 (39.7)	214	65 (30.4)	214	1.31 (1.01, 1.70)	0.042	
	BOOST II AUS	67 (27.9)	240	57 (23.8)	240	1.17 (0.86, 1.59)	0.306	
	NeOProM	**331 (31.6)**	**1049**	**280 (26.5)**	**1058**	**1.20 (1.05, 1.38)**	**0.007**	
GA>=26 wks	SUPPORT	49 (13.4)	366	39 (10.7)	365	1.25 (0.84, 1.85)	0.269	
	COT	30 (9.1)	329	24 (7.3)	328	1.25 (0.75, 2.11)	0.393	
	BOOST NZ	4 (4.1)	98	12 (12.2)	98	0.37 (0.11, 1.21)	0.100	
	BOOST II UK	37 (13.7)	270	33 (12.3)	269	1.12 (0.71, 1.76)	0.634	
	BOOST II AUS	33 (10.3)	321	30 (9.3)	322	1.10 (0.70, 1.75)	0.672	
	NeOProM	**153 (11.1)**	**1384**	**138 (10.0)**	**1382**	**1.11 (0.89, 1.38)**	**0.354**	
Inborn	SUPPORT	140 (22.1)	633	118 (18.2)	648	1.24 (0.99, 1.55)	0.063	0.084
	COT	91 (16.7)	545	77 (14.7)	523	1.14 (0.87, 1.50)	0.329	
	BOOST NZ	24 (15.1)	159	24 (15.3)	157	0.96 (0.59, 1.59)	0.885	
	BOOST II UK	107 (25.1)	427	85 (20.1)	423	1.25 (0.97, 1.60)	0.086	
	BOOST II AUS	91 (17.6)	517	73 (14.0)	522	1.26 (0.95, 1.67)	0.110	
	NeOProM	**453 (19.9)**	**2281**	**377 (16.6)**	**2273**	**1.21 (1.07, 1.37)**	**0.003**	
Outborn	SUPPORT		.		.		.	
	COT	6 (15.0)	40	11 (20.4)	54	0.87 (0.39, 1.92)	0.731	
	BOOST NZ	1 (9.1)	11	3 (23.1)	13	0.39 (0.05, 2.91)	0.361	
	BOOST II UK	15 (26.3)	57	13 (21.7)	60	1.17 (0.60, 2.28)	0.649	
	BOOST II AUS	9 (20.5)	44	14 (35.0)	40	0.59 (0.29, 1.20)	0.147	
	NeOProM	**31 (20.4)**	**152**	**41 (24.6)**	**167**	**0.81 (0.53, 1.23)**	**0.325**	
Vaginal	SUPPORT	52 (25.7)	202	33 (15.3)	216	1.67 (1.13, 2.49)	0.011	0.367
	COT	36 (16.6)	217	36 (15.5)	233	1.07 (0.70, 1.64)	0.750	
	BOOST NZ	15 (20.0)	75	15 (19.0)	79	1.03 (0.55, 1.90)	0.936	
	BOOST II UK	83 (28.5)	291	71 (23.7)	299	1.20 (0.91, 1.58)	0.201	
	BOOST II AUS	52 (19.2)	271	43 (16.9)	254	1.14 (0.79, 1.65)	0.481	
	NeOProM	**238 (22.5)**	**1056**	**198 (18.3)**	**1081**	**1.23 (1.04, 1.46)**	**0.016**	
Caesarean	SUPPORT	88 (20.4)	431	85 (19.7)	432	1.05 (0.80, 1.38)	0.714	
	COT	59 (16.1)	366	52 (15.2)	343	1.07 (0.77, 1.50)	0.671	
	BOOST NZ	10 (10.5)	95	12 (13.2)	91	0.86 (0.40, 1.83)	0.694	
	BOOST II UK	39 (20.2)	193	27 (14.7)	184	1.37 (0.87, 2.16)	0.169	
	BOOST II AUS	48 (16.7)	288	43 (14.1)	304	1.17 (0.80, 1.69)	0.416	
	NeOProM	**244 (17.8)**	**1373**	**219 (16.2)**	**1354**	**1.11 (0.94, 1.31)**	**0.230**	
ANS - No	SUPPORT	3 (15.0)	20	4 (14.3)	28	1.06 (0.27, 4.19)	0.933	0.252
	COT	22 (32.4)	68	14 (24.6)	57	1.38 (0.80, 2.39)	0.244	
	BOOST NZ	4 (20.0)	20	5 (27.8)	18	0.40 (0.05, 3.26)	0.390	
	BOOST II UK	14 (35.0)	40	18 (37.5)	48	0.92 (0.51, 1.63)	0.765	

eTable 15. Death prior to 18-24 months' age corrected for prematurity, by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	BOOST II AUS	12 (19.0)	63	11 (27.5)	40	0.69 (0.35, 1.37)	0.289	
	NeOProM	**55 (26.1)**	**211**	**52 (27.2)**	**191**	**0.97 (0.70, 1.34)**	**0.856**	
ANS - Yes	SUPPORT	137 (22.3)	613	113 (18.3)	619	1.25 (0.99, 1.57)	0.056	
	COT	74 (14.4)	515	72 (13.9)	518	1.04 (0.78, 1.40)	0.778	
	BOOST NZ	21 (14.0)	150	22 (14.5)	152	0.96 (0.57, 1.63)	0.885	
	BOOST II UK	107 (24.2)	442	80 (18.5)	433	1.31 (1.01, 1.70)	0.043	
	BOOST II AUS	88 (17.8)	495	75 (14.5)	516	1.22 (0.92, 1.62)	0.160	
	NeOProM	**427 (19.3)**	**2215**	**362 (16.2)**	**2238**	**1.20 (1.06, 1.36)**	**0.005**	
Male	SUPPORT	82 (24.8)	331	73 (20.0)	365	1.25 (0.94, 1.65)	0.128	0.840
	COT	55 (17.0)	324	60 (19.2)	312	0.89 (0.64, 1.23)	0.465	
	BOOST NZ	18 (20.0)	90	12 (13.3)	90	1.52 (0.80, 2.91)	0.204	
	BOOST II UK	70 (27.2)	257	54 (21.1)	256	1.29 (0.94, 1.76)	0.115	
	BOOST II AUS	64 (22.1)	289	52 (17.7)	293	1.25 (0.89, 1.74)	0.193	
	NeOProM	**289 (22.4)**	**1291**	**251 (19.1)**	**1316**	**1.18 (1.02, 1.38)**	**0.029**	
Female	SUPPORT	58 (19.2)	302	45 (15.9)	283	1.23 (0.86, 1.77)	0.255	
	COT	42 (16.1)	261	28 (10.6)	265	1.52 (0.98, 2.36)	0.060	
	BOOST NZ	7 (8.8)	80	15 (18.8)	80	1.60 (0.43, 5.95)	0.487	
	BOOST II UK	52 (22.9)	227	44 (19.4)	227	1.18 (0.83, 1.69)	0.360	
	BOOST II AUS	36 (13.2)	272	35 (13.0)	269	1.04 (0.67, 1.59)	0.874	
	NeOProM	**195 (17.1)**	**1142**	**167 (14.9)**	**1124**	**1.16 (0.96, 1.39)**	**0.130**	
Singleton	SUPPORT	108 (22.8)	473	76 (16.0)	476	1.43 (1.10, 1.86)	0.008	0.076
	COT	58 (15.0)	386	60 (15.0)	399	1.00 (0.72, 1.39)	0.996	
	BOOST NZ	18 (14.5)	124	17 (13.7)	124	1.06 (0.57, 1.96)	0.855	
	BOOST II UK	91 (26.3)	346	69 (19.9)	347	1.32 (1.00, 1.74)	0.046	
	BOOST II AUS	80 (18.9)	424	66 (15.4)	429	1.23 (0.91, 1.65)	0.178	
	NeOProM	**355 (20.3)**	**1753**	**288 (16.2)**	**1775**	**1.25 (1.09, 1.44)**	**0.002**	
Multiple	SUPPORT	32 (20.0)	160	42 (24.4)	172	0.82 (0.53, 1.27)	0.372	
	COT	39 (19.6)	199	28 (15.7)	178	1.25 (0.83, 1.89)	0.289	
	BOOST NZ	7 (15.2)	46	10 (21.7)	46	0.70 (0.34, 1.44)	0.332	
	BOOST II UK	31 (22.5)	138	29 (21.3)	136	1.05 (0.66, 1.67)	0.828	
	BOOST II AUS	20 (14.6)	137	21 (15.8)	133	0.94 (0.54, 1.64)	0.817	
	NeOProM	**129 (19.0)**	**680**	**130 (19.5)**	**665**	**0.99 (0.79, 1.23)**	**0.901**	
start<6 hrs	SUPPORT	135 (21.9)	617	111 (17.6)	631	1.27 (1.00, 1.60)	0.046	0.237
	COT	3 (11.5)	26	4 (16.0)	25	0.72 (0.18, 2.90	0.428	
	BOOST NZ	3 (10.7)	28	3 (10.7)	28	1.00 (0.22, 4.54)	0.987	
	BOOST II UK		.		.		.	
	BOOST II AUS	13 (22.0)	59	6 (10.0)	60	1.78 (0.75, 4.21)	0.191	
	NeOProM	**154 (21.1)**	**730**	**124 (16.7)**	**744**	**1.28 (1.03, 1.59)**	**0.027**	
>=6 hrs	SUPPORT	0	5	1 (20.0)	5		***	
	COT	94 (16.8)	559	84 (15.2)	552	1.11 (0.85, 1.44)	0.445	
	BOOST NZ	22 (15.5)	142	23 (16.3)	141	0.94 (0.57, 1.55)	0.809	

eTable 15. Death prior to 18-24 months' age corrected for prematurity, by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	BOOST II UK		.		.		.	
	BOOST II AUS	87 (17.4)	499	80 (16.0)	501	1.09 (0.83, 1.44)	0.527	
	NeOProM	**203 (16.8)**	**1205**	**188 (15.7)**	**1199**	**1.08 (0.90, 1.29)**	**0.409**	
Original	SUPPORT	140 (22.1)	633	118 (18.2)	648	1.24 (0.99, 1.55)	0.063	0.034
software	COT	49 (17.4)	281	48 (17.9)	268	0.99 (0.69, 1.40)	0.944	
	BOOST NZ	25 (14.7)	170	27 (15.9)	170	0.91 (0.56, 1.46)	0.689	
	BOOST II UK	21 (18.6)	113	29 (25.4)	114	0.70 (0.42, 1.17)	0.175	
	BOOST II AUS	57 (16.5)	345	57 (16.5)	345	1.01 (0.72, 1.40)	0.961	
	NeOProM	**292 (18.9)**	**1542**	**279 (18.1)**	**1545**	**1.06 (0.91, 1.23)**	**0.467**	
Revised	SUPPORT		.		.		.	
software	COT	46 (16.8)	273	38 (14.1)	270	1.19 (0.80, 1.77)	0.380	
	BOOST NZ		.		.		.	
	BOOST II UK	101 (27.2)	371	69 (18.7)	369	1.46 (1.11, 1.91)	0.007	
	BOOST II AUS	43 (19.9)	216	30 (13.8)	217	1.44 (0.95, 2.20)	0.088	
	NeOProM	**190 (22.1)**	**860**	**137 (16.0)**	**856**	**1.38 (1.14, 1.68)**	**0.001**	
SGA:	SUPPORT	116 (19.6)	592	102 (17.2)	593	1.16 (0.91, 1.48)	0.237	0.287
Trialist	COT	83 (15.6)	531	74 (14.1)	526	1.11 (0.83, 1.47)	0.481	
defined -	BOOST II NZ	24 (15.7)	153	23 (14.6)	157	1.06 (0.63, 1.77)	0.834	
No	BOOST II UK	100 (24.6)	407	79 (19.4)	408	1.26 (0.97, 1.64)	0.077	
	BOOST II AUS	75 (15.6)	481	73 (15.1)	485	1.04 (0.77, 1.40)	0.810	
	NeOProM	**398 (18.4)**	**2164**	**351 (16.2)**	**2169**	**1.14 (1.00, 1.30)**	**0.047**	
Yes	SUPPORT	24 (58.5)	41	16 (29.1)	55	1.99 (1.22, 3.24)	0.006	
	COT	14 (25.9)	54	14 (27.5)	51	0.95 (0.51, 1.74)	0.856	
	BOOST II NZ	1 (5.9)	17	4 (30.8)	13	0.18 (0.02, 1.44)	0.106	
	BOOST II UK	21 (28.0)	75	17 (23.6)	72	1.74 (0.98, 3.09)	0.345	
	BOOST II AUS	25 (31.6)	79	14 (18.2)	77	1.24 (0.53, 2.87)	0.618	
	NeOProM	**85 (32.0)**	**266**	**65 (24.3)**	**268**	**1.36 (1.04, 1.78)**	**0.033**	
SGA:	SUPPORT	110 (20.3)	541	84 (15.8)	533	1.31 (1.01, 1.70)	0.043	0.674
NeOProM	COT	83 (15.6)	531	74 (14.1)	526	1.11 (0.83, 1.47)	0.481	
defined -	BOOST II NZ	24 (15.7)	153	23 (14.6)	157	1.06 (0.63, 1.77)	0.834	
No	BOOST II UK	105 (24.6)	427	81 (19.0)	427	1.29 (0.99, 1.67)	0.055	
	BOOST II AUS	75 (15.6)	481	73 (15.1)	485	1.04 (0.77, 1.40)	0.810	
	NeOProM	**397 (18.6)**	**2133**	**335 (15.7)**	**2128**	**1.18 (1.04, 1.35)**	**0.012**	
Yes	SUPPORT	30 (32.6)	92	34 (29.6)	115	1.11 (0.74, 1.68)	0.605	
	COT	14 (25.9)	54	14 (27.5)	51	0.95 (0.51, 1.74)	0.856	
	BOOST II NZ	1 (5.9)	17	4 (30.8)	13	0.18 (0.02, 1.44)	0.106	
	BOOST II UK	17 (29.8)	57	17 (30.4)	56	0.93 (0.51, 1.68)	0.799	
	BOOST II AUS	25 (31.6)	79	14 (18.2)	77	1.24 (0.53, 2.87)	0.618	
	NeOProM	**87 (29.1)**	**299**	**83 (26.6)**	**312**	**1.08 (0.83, 1.40)**	**0.572**	

* Analysis adjusted for trials and multiple births

Abbreviations/definitions

CI: confidence interval; RR: relative risk; GA: gestational age; SUPPORT: Surfactant Positive Airway Pressure and Pulse Oximetry Trial; COT: Canadian Oxygen Trial; BOOST: Benefits of Oxygen Saturation Targeting; NZ: New Zealand; UK: United Kingdom; AUS: Australia; NeOProM: Neonatal Oxygenation Prospective Meta-analysis; inborn: born inside the treating center; outborn: born outside the treating center (e.g. transferred from another hospital; vaginal: mode of delivery through the vagina; Caesarean: mode of delivery via surgical procedure; ANS: antenatal corticosteroids; singleton: child born as a single birth; multiple: more than one child per birth; start<6 hrs: intervention commenced less than 6 hours after birth; start>=6 hrs: intervention commenced greater than or equal to 6 hours after birth; original software: original oximeter software; revised software: revised oximeter software; SGA: small for gestational age; SGA NeOProM defined: small for gestational age as per definition used by NeOProM collaboration, i.e. less than 10th percentile using charts from Kramer et al.[1]

The subgroup analysis by oximeter software type (original vs revised) excludes n=74 infants in COT who were exposed to both the original and revised software.

Empty cells (.) indicate data not collected or not applicable in this trial.

*** Low / no event rate(s) makes parameter not estimable.

eTable 16. Death prior to 36 weeks' postmenstrual age, by subgroups

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
GA<26 wks	SUPPORT	75 (27.2)	276	64 (22.1)	289	1.25 (0.92, 1.70)	0.151	0.642
	COT	60 (23.1)	260	58 (23.0)	252	1.00 (0.73, 1.37)	0.979	
	BOOST NZ	15 (20.8)	72	11 (15.3)	72	1.40 (0.79, 2.48)	0.244	
	BOOST II UK	77 (36.0)	214	61 (28.5)	214	1.27 (0.96, 1.67)	0.094	
	BOOST II AUS	63 (26.1)	241	49 (20.4)	240	1.27 (0.91, 1.78)	0.154	
	NeOProM	**290 (27.3)**	**1063**	**243 (22.8)**	**1067**	**1.21 (1.04, 1.40)**	**0.012**	
GA>=26 wks	SUPPORT	39 (10.3)	378	30 (8.0)	373	1.26 (0.81, 1.97)	0.307	
	COT	26 (7.6)	342	22 (6.3)	347	1.21 (0.70, 2.10)	0.495	
	BOOST NZ	2 (2.0)	98	11 (11.2)	98	0.18 (0.04, 0.77)	0.021	
	BOOST II UK	31 (11.5)	270	24 (8.9)	269	1.27 (0.75, 2.17)	0.372	
	BOOST II AUS	27 (8.3)	327	24 (7.3)	327	1.13 (0.68, 1.88)	0.647	
	NeOProM	**125 (8.8)**	**1415**	**111 (7.9)**	**1414**	**1.13 (0.88, 1.44)**	**0.334**	
Inborn	SUPPORT	114 (17.4)	654	94 (14.2)	662	1.25 (0.97, 1.63)	0.086	0.064
	COT	80 (14.2)	562	69 (12.7)	543	1.12 (0.84, 1.51)	0.436	
	BOOST NZ	16 (10.1)	159	19 (12.1)	157	0.84 (0.46, 1.54)	0.568	
	BOOST II UK	95 (22.2)	427	73 (17.3)	423	1.29 (0.98, 1.69)	0.070	
	BOOST II AUS	81 (15.5)	524	59 (11.2)	525	1.37 (1.00, 1.87)	0.047	
	NeOProM	**386 (16.6)**	**2325**	**314 (13.6)**	**2310**	**1.23 (1.07, 1.41)**	**0.003**	
Outborn	SUPPORT		.		.		.	
	COT	6 (15.0)	40	11 (19.6)	56	0.91 (0.42, 1.99)	0.822	
	BOOST NZ	1 (9.1)	11	3 (23.1)	13	0.39 (0.05, 2.91)	0.361	
	BOOST II UK	13 (22.8)	57	12 (20.0)	60	1.09 (0.53, 2.24)	0.816	
	BOOST II AUS	9 (20.5)	44	14 (33.3)	42	0.62 (0.30, 1.27)	0.189	
	NeOProM	**29 (19.1)**	**152**	**40 (23.4)**	**171**	**0.80 (0.52, 1.23)**	**0.299**	
Vaginal	SUPPORT	39 (18.3)	213	31 (14.1)	220	1.30 (0.84, 2.00)	0.243	0.986
	COT	33 (14.9)	222	34 (14.0)	243	1.05 (0.67, 1.65)	0.816	
	BOOST NZ	13 (17.3)	75	14 (17.7)	79	0.96 (0.51, 1.81)	0.891	
	BOOST II UK	75 (25.8)	291	65 (21.7)	299	1.18 (0.88, 1.58)	0.273	
	BOOST II AUS	49 (18.0)	272	38 (14.8)	257	1.23 (0.84, 1.82)	0.289	
	NeOProM	**209 (19.5)**	**1073**	**182 (16.6)**	**1098**	**1.17 (0.98, 1.40)**	**0.082**	
Caesarean	SUPPORT	75 (17.0)	441	63 (14.3)	442	1.22 (0.89, 1.68)	0.217	
	COT	51 (13.5)	377	46 (13.0)	355	1.04 (0.73, 1.50)	0.814	
	BOOST NZ	4 (4.2)	95	8 (8.8)	91	0.59 (0.17, 2.10)	0.413	
	BOOST II UK	33 (17.1)	193	20 (10.9)	184	1.56 (0.93, 2.63)	0.095	
	BOOST II AUS	41 (13.9)	294	34 (11.1)	306	1.22 (0.80, 1.86)	0.349	
	NeOProM	**204 (14.6)**	**1400**	**171 (12.4)**	**1378**	**1.18 (0.98, 1.43)**	**0.088**	
ANS - No	SUPPORT	1 (4.8)	21	4 (13.8)	29	0.35 (0.04, 2.87)	0.327	0.169
	COT	21 (30.0)	70	12 (19.7)	61	1.57 (0.86, 2.89)	0.144	
	BOOST NZ	4 (20.0)	20	5 (27.8)	18	0.40 (0.05, 3.26)	0.390	
	BOOST II UK	13 (32.5)	40	18 (37.5)	48	0.85 (0.47, 1.54)	0.594	

eTable 16. Death prior to 36 weeks' postmenstrual age, by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	BOOST II AUS	12 (18.8)	64	11 (26.2)	42	0.71 (0.35, 1.41)	0.324	
	NeOProM	**51 (23.7)**	**215**	**50 (25.3)**	**198**	**0.94 (0.67, 1.31)**	**0.709**	
ANS - Yes	SUPPORT	113 (17.9)	633	89 (14.1)	632	1.30 (1.00, 1.69)	0.051	
	COT	64 (12.1)	530	66 (12.3)	536	0.98 (0.72, 1.35)	0.922	
	BOOST NZ	13 (8.7)	150	17 (11.2)	152	0.79 (0.41, 1.53)	0.482	
	BOOST II UK	95 (21.5)	442	67 (15.5)	433	1.38 (1.04, 1.84)	0.026	
	BOOST II AUS	78 (15.6)	501	61 (11.8)	519	1.32 (0.97, 1.80)	0.078	
	NeOProM	**363 (16.1)**	**2256**	**300 (13.2)**	**2272**	**1.23 (1.06, 1.41)**	**0.005**	
Male	SUPPORT	67 (19.6)	341	57 (15.4)	371	1.29 (0.93, 1.79)	0.131	0.814
	COT	49 (14.9)	329	55 (16.9)	326	0.88 (0.62, 1.25)	0.483	
	BOOST NZ	12 (13.3)	90	10 (11.1)	90	1.21 (0.55, 2.63)	0.634	
	BOOST II UK	59 (23.0)	257	44 (17.2)	256	1.33 (0.93, 1.89)	0.115	
	BOOST II AUS	58 (19.8)	293	44 (14.9)	296	1.33 (0.92, 1.90)	0.125	
	NeOProM	**245 (18.7)**	**1310**	**210 (15.7)**	**1339**	**1.20 (1.01, 1.42)**	**0.037**	
Female	SUPPORT	47 (15.0)	313	37 (12.7)	291	1.22 (0.81, 1.84)	0.341	
	COT	37 (13.6)	273	25 (9.2)	273	1.48 (0.93, 2.37)	0.101	
	BOOST NZ	5 (6.3)	80	12 (15.0)	80	0.50 (0.15, 1.61)	0.245	
	BOOST II UK	49 (21.6)	227	41 (18.1)	227	1.20 (0.82, 1.74)	0.350	
	BOOST II AUS	32 (11.6)	275	29 (10.7)	271	1.10 (0.69, 1.76)	0.677	
	NeOProM	**170 (14.6)**	**1168**	**144 (12.6)**	**1142**	**1.16 (0.94, 1.42)**	**0.156**	
Singleton	SUPPORT	85 (17.2)	493	57 (11.7)	486	1.47 (1.08, 2.01)	0.015	0.058
	COT	51 (12.9)	396	53 (12.7)	417	1.01 (0.71, 1.45)	0.943	
	BOOST NZ	12 (9.7)	124	14 (11.3)	124	0.86 (0.41, 1.78)	0.679	
	BOOST II UK	80 (23.1)	346	57 (16.4)	347	1.41 (1.04, 1.91)	0.028	
	BOOST II AUS	71 (16.5)	430	55 (12.7)	432	1.30 (0.94, 1.80)	0.118	
	NeOProM	**299 (16.7)**	**1789**	**236 (13.1)**	**1806**	**1.28 (1.10, 1.50)**	**0.002**	
Multiple	SUPPORT	29 (18.0)	161	37 (21.0)	176	0.86 (0.54, 1.37)	0.520	
	COT	35 (17.0)	206	27 (14.8)	182	1.14 (0.74, 1.77)	0.552	
	BOOST NZ	5 (10.9)	46	8 (17.4)	46	0.67 (0.28, 1.59)	0.362	
	BOOST II UK	28 (20.3)	138	28 (20.6)	136	0.98 (0.61, 1.58)	0.947	
	BOOST II AUS	19 (13.8)	138	18 (13.3)	135	1.04 (0.58, 1.86)	0.906	
	NeOProM	**116 (16.8)**	**689**	**118 (17.5)**	**675**	**0.97 (0.77, 1.23)**	**0.827**	
start<6 hrs	SUPPORT	109 (17.1)	638	87 (13.5)	645	1.29 (0.99, 1.69)	0.061	0.164
	COT	3 (11.1)	27	3 (11.5)	26	0.96 (0.21, 4.35)	0.733	
	BOOST NZ	3 (10.7)	28	1 (3.6)	28	2.80 (0.50, 15.7)	0.240	
	BOOST II UK		.		.		.	
	BOOST II AUS	11 (18.6)	59	5 (8.3)	60	1.55 (0.57, 4.20)	0.391	
	NeOProM	**126 (16.8)**	**752**	**96 (12.6)**	**759**	**1.34 (1.04, 1.73)**	**0.023**	
>=6 hrs	SUPPORT	0	5	1 (20.0)	5		***	
	COT	83 (14.4)	575	77 (13.4)	573	1.07 (0.81, 1.43)	0.619	
	BOOST NZ	14 (9.9)	142	20 (14.2)	141	0.70 (0.38, 1.29)	0.254	

eTable 16. Death prior to 36 weeks' postmenstrual age, by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	BOOST II UK		.		.		.	
	BOOST II AUS	79 (15.6)	506	67 (13.2)	506	1.18 (0.87, 1.59)	0.284	
	NeOProM	**176 (14.3)**	**1228**	**165 (13.5)**	**1225**	**1.07 (0.88, 1.30)**	**0.515**	
Original	SUPPORT	114 (17.4)	654	94 (14.2)	662	1.25 (0.97, 1.63)	0.086	0.020
software	COT	45 (15.7)	286	45 (16.2)	278	0.99 (0.68, 1.43)	0.951	
	BOOST NZ	17 (10.0)	170	22 (12.9)	170	0.78 (0.44, 1.38)	0.396	
	BOOST II UK	18 (15.9)	113	26 (22.8)	114	0.66 (0.38, 1.16)	0.151	
	BOOST II AUS	50 (14.5)	346	50 (14.5)	346	1.00 (0.70, 1.44)	0.982	
	NeOProM	**244 (15.6)**	**1569**	**237 (15.1)**	**1570**	**1.03 (0.88, 1.22)**	**0.687**	
Revised	SUPPORT		.		.		.	
software	COT	39 (13.7)	284	35 (12.5)	279	1.10 (0.72, 1.68)	0.672	
	BOOST NZ		.		.		.	
	BOOST II UK	90 (24.3)	371	59 (16.0)	369	1.52 (1.13, 2.04)	0.006	
	BOOST II AUS	40 (18.0)	222	23 (10.4)	221	1.73 (1.08, 2.77)	0.022	
	NeOProM	**169 (19.3)**	**877**	**117 (13.5)**	**869**	**1.43 (1.16, 1.78)**	**0.001**	
SGA:	SUPPORT	96 (15.7)	613	82 (13.5)	607	1.18 (0.89, 1.57)	0.237	0.274
Trialist	COT	74 (13.5)	548	68 (12.4)	548	1.08 (0.80, 1.47)	0.612	
defined -	BOOST II NZ	17 (11.1)	153	20 (12.7)	157	0.87 (0.48, 1.59)	0.660	
No	BOOST II UK	90 (22.1)	407	72 (17.6)	408	1.24 (0.94, 1.64)	0.121	
	BOOST II AUS	71 (14.6)	487	62 (12.7)	489	1.15 (0.84, 1.58)	0.389	
	NeOProM	**348 (15.8)**	**2208**	**304 (13.8)**	**2209**	**1.15 (1.00, 1.32)**	**0.057**	
Yes	SUPPORT	18 (43.9)	41	12 (21.8)	55	2.00 (1.09, 3.67)	0.026	
	COT	12 (22.2)	54	12 (23.5)	51	0.94 (0.48, 1.87)	0.870	
	BOOST II NZ	0	17	2 (15.4)	13	0.16 (0.01, 2.99)	0.675	
	BOOST II UK	17 (22.7)	75	11 (15.3)	72	1.48 (0.75, 2.95)	0.238	
	BOOST II AUS	19 (23.8)	80	11 (14.1)	78	1.68 (0.86, 3.30)	0.558	
	NeOProM	**66 (24.7)**	**267**	**48 (17.8)**	**269**	**1.43 (1.03, 1.97)**	**0.032**	
SGA:	SUPPORT	90 (16.1)	560	71 (13.0)	546	1.25 (0.93, 1.67)	0.135	0.722
NeOProM	COT	74 (13.5)	548	68 (12.4)	548	1.08 (0.80, 1.47)	0.612	
defined -	BOOST II NZ	17 (11.1)	153	20 (12.7)	157	0.87 (0.48, 1.59)	0.660	
No	BOOST II UK	94 (22.0)	427	74 (17.3)	427	1.26 (0.96, 1.66)	0.103	
	BOOST II AUS	71 (14.6)	487	62 (12.7)	489	1.15 (0.84, 1.58)	0.389	
	NeOProM	**346 (15.9)**	**2175**	**295 (13.6)**	**2167**	**1.17 (1.01, 1.35)**	**0.033**	
Yes	SUPPORT	24 (25.5)	94	23 (19.8)	116	1.32 (0.79, 2.20)	0.285	
	COT	12 (22.2)	54	12 (23.5)	51	0.94 (0.48, 1.87)	0.870	
	BOOST II NZ	0	17	2 (15.4)	13	0.16 (0.01, 2.99)	0.675	
	BOOST II UK	14 (24.6)	57	11 (19.6)	56	1.25 (0.62, 2.51)	0.421	
	BOOST II AUS	19 (23.8)	80	11 (14.1)	78	1.68 (0.86, 3.30)	0.558	
	NeOProM	**69 (22.8)**	**302**	**59 (18.8)**	**314**	**1.23 (0.90, 1.67)**	**0.194**	

* Analysis adjusted for trials and multiple births

Abbreviations/definitions

CI: confidence interval; RR: relative risk; GA: gestational age; SUPPORT: Surfactant Positive Airway Pressure and Pulse Oximetry Trial; COT: Canadian Oxygen Trial; BOOST: Benefits of Oxygen Saturation Targeting; NZ: New Zealand; UK: United Kingdom; AUS: Australia; NeOProM: Neonatal Oxygenation Prospective Meta-analysis; inborn: born inside the treating center; outborn: born outside the treating center (e.g. transferred from another hospital; vaginal: mode of delivery through the vagina; Caesarean: mode of delivery via surgical procedure; ANS: antenatal corticosteroids; singleton: child born as a single birth; multiple: more than one child per birth; start<6 hrs: intervention commenced less than 6 hours after birth; start>=6 hrs: intervention commenced greater than or equal to 6 hours after birth; original software: original oximeter software; revised software: revised oximeter software; SGA: small for gestational age; SGA NeOProM defined: small for gestational age as per definition used by NeOProM collaboration, i.e. less than 10th percentile using charts from Kramer et al.[1]

The subgroup analysis by oximeter software type (original vs revised) excludes n=74 infants in COT who were exposed to both the original and revised software.

Empty cells (.) indicate data not collected or not applicable in this trial.

*** Low / no event rate(s) makes parameter not estimable.

eTable 17. Death prior to discharge, by subgroups

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
GA<26 wks	SUPPORT	85 (30.8)	276	73 (25.3)	289	1.24 (0.94, 1.64)	0.127	0.729
	COT	66 (25.4)	260	63 (25.0)	252	1.02 (0.76, 1.37)	0.892	
	BOOST NZ	17 (23.6)	72	13 (18.1)	72	1.31 (0.76, 2.26)	0.322	
	BOOST II UK	80 (37.4)	214	64 (29.9)	214	1.26 (0.96, 1.64)	0.097	
	BOOST II AUS	66 (27.4)	241	55 (22.9)	240	1.19 (0.87, 1.63)	0.268	
	NeOProM	**314 (29.5)**	**1063**	**268 (25.1)**	**1067**	**1.19 (1.03, 1.37)**	**0.015**	
GA>=26 wks	SUPPORT	45 (11.9)	378	34 (9.1)	373	1.28 (0.85, 1.94)	0.241	
	COT	29 (8.5)	342	24 (6.9)	347	1.24 (0.74, 2.09)	0.421	
	BOOST NZ	4 (4.1)	98	11 (11.2)	98	0.40 (0.11, 1.38)	0.145	
	BOOST II UK	35 (13.0)	270	32 (11.9)	269	1.09 (0.68, 1.74)	0.725	
	BOOST II AUS	33 (10.1)	327	28 (8.6)	327	1.18 (0.74, 1.88)	0.492	
	NeOProM	**146 (10.3)**	**1415**	**129 (9.1)**	**1414**	**1.13 (0.90, 1.42)**	**0.282**	
Inborn	SUPPORT	130 (19.9)	654	107 (16.2)	662	1.26 (0.99, 1.60)	0.060	0.054
	COT	89 (15.8)	562	76 (14.0)	543	1.14 (0.87, 1.50)	0.354	
	BOOST NZ	20 (12.6)	159	21 (13.4)	157	0.95 (0.56, 1.61)	0.855	
	BOOST II UK	102 (23.9)	427	83 (19.6)	423	1.22 (0.94, 1.57)	0.135	
	BOOST II AUS	90 (17.2)	524	69 (13.1)	525	1.31 (0.98, 1.74)	0.069	
	NeOProM	**431 (18.5)**	**2326**	**356 (15.4)**	**2310**	**1.21 (1.07, 1.38)**	**0.003**	
Outborn	SUPPORT		.		.		.	
	COT	6 (15.0)	40	11 (19.6)	56	0.91 (0.42, 1.99)	0.822	
	BOOST NZ	1 (9.1)	11	3 (23.1)	13	0.39 (0.05, 2.91)	0.361	
	BOOST II UK	13 (22.8)	57	13 (21.7)	60	1.01 (0.50, 2.03)	0.977	
	BOOST II AUS	9 (20.5)	44	14 (33.3)	42	0.62 (0.30, 1.27)	0.189	
	NeOProM	**29 (19.1)**	**152**	**41 (24.0)**	**171**	**0.78 (0.51, 1.19)**	**0.248**	
Vaginal	SUPPORT	44 (20.7)	213	33 (15.0)	220	1.37 (0.91, 2.08)	0.131	0.803
	COT	36 (16.2)	222	36 (14.8)	243	1.09 (0.71, 1.67)	0.687	
	BOOST NZ	13 (17.3)	75	14 (17.7)	79	0.96 (0.51, 1.81)	0.891	
	BOOST II UK	79 (27.1)	291	69 (23.1)	299	1.17 (0.88, 1.56)	0.269	
	BOOST II AUS	52 (19.1)	272	42 (16.3)	257	1.18 (0.81, 1.71)	0.388	
	NeOProM	**224 (20.9)**	**1073**	**194 (17.7)**	**1098**	**1.18 (0.99, 1.40)**	**0.062**	
Caesarean	SUPPORT	86 (19.5)	441	74 (16.7)	442	1.19 (0.89, 1.59)	0.239	
	COT	57 (15.1)	377	51 (14.4)	355	1.06 (0.75, 1.49)	0.740	
	BOOST NZ	8 (8.4)	95	10 (11.0)	91	1.01 (0.45, 2.27)	0.980	
	BOOST II UK	36 (18.7)	193	27 (14.7)	184	1.26 (0.80, 2.01)	0.319	
	BOOST II AUS	47 (16.0)	294	40 (13.1)	306	1.21 (0.82, 1.78)	0.332	
	NeOProM	**234 (16.7)**	**1400**	**202 (14.7)**	**1378**	**1.15 (0.97, 1.36)**	**0.115**	
ANS - No	SUPPORT	3 (14.3)	21	4 (13.8)	29	1.04 (0.26, 4.14)	0.951	0.232
	COT	22 (31.4)	70	14 (23.0)	61	1.44 (0.83, 2.49)	0.198	
	BOOST NZ	4 (20.0)	20	5 (27.8)	18	0.40 (0.05, 3.26)	0.390	
	BOOST II UK	13 (32.5)	40	18 (37.5)	48	0.85 (0.47, 1.54)	0.594	

eTable 17. Death prior to discharge, by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	BOOST II AUS	12 (18.8)	64	11 (26.2)	42	0.71 (0.35, 1.41)	0.324	
	NeOProM	**54 (25.1)**	**215**	**52 (26.3)**	**198**	**0.96 (0.70, 1.34)**	**0.823**	
ANS - Yes	SUPPORT	127 (20.1)	633	102 (16.1)	632	1.27 (1.00, 1.63)	0.052	
	COT	72 (13.6)	530	71 (13.2)	536	1.03 (0.77, 1.39)	0.836	
	BOOST NZ	17 (11.3)	150	19 (12.5)	152	0.94 (0.53, 1.65)	0.820	
	BOOST II UK	101 (22.9)	442	78 (18.0)	433	1.26 (0.97, 1.65)	0.084	
	BOOST II AUS	87 (17.4)	501	71 (13.7)	519	1.27 (0.95, 1.69)	0.104	
	NeOProM	**404 (17.9)**	**2256**	**341 (15.0)**	**2272**	**1.20 (1.05, 1.37)**	**0.007**	
Male	SUPPORT	78 (22.9)	341	66 (17.8)	371	1.30 (0.96, 1.75)	0.086	0.648
	COT	54 (16.4)	329	59 (18.1)	326	0.91 (0.66, 1.26)	0.577	
	BOOST NZ	15 (16.7)	90	11 (12.2)	90	1.38 (0.68, 2.80)	0.371	
	BOOST II UK	65 (25.3)	257	52 (20.3)	256	1.24 (0.90, 1.72)	0.193	
	BOOST II AUS	64 (21.8)	293	49 (16.6)	296	1.32 (0.94, 1.85)	0.111	
	NeOProM	**276 (21.1)**	**1310**	**237 (17.7)**	**1339**	**1.20 (1.02, 1.40)**	**0.024**	
Female	SUPPORT	52 (16.6)	313	41 (14.1)	291	1.21 (0.83, 1.78)	0.327	
	COT	41 (15.0)	273	28 (10.3)	273	1.47 (0.94, 2.28)	0.090	
	BOOST NZ	6 (7.5)	80	13 (16.3)	80	2.71 (0.27, 27.5)	0.399	
	BOOST II UK	50 (22.0)	227	44 (19.4)	227	1.14 (0.79, 1.64)	0.488	
	BOOST II AUS	35 (12.7)	275	34 (12.5)	271	1.03 (0.67, 1.59)	0.889	
	NeOProM	**184 (15.8)**	**1168**	**160 (14.0)**	**1142**	**1.13 (0.93, 1.37)**	**0.208**	
Singleton	SUPPORT	100 (20.3)	493	67 (13.8)	486	1.47 (1.11, 1.95)	0.007	0.071
	COT	57 (14.4)	396	59 (14.1)	417	1.02 (0.73, 1.43)	0.920	
	BOOST NZ	14 (11.3)	124	16 (12.9)	124	0.87 (0.45, 1.71)	0.697	
	BOOST II UK	86 (24.9)	346	67 (19.3)	347	1.29 (0.97, 1.71)	0.080	
	BOOST II AUS	79 (18.4)	430	62 (14.4)	432	1.28 (0.94, 1.74)	0.112	
	NeOProM	**336 (18.8)**	**1789**	**271 (15.0)**	**1806**	**1.25 (1.08, 1.45)**	**0.002**	
Multiple	SUPPORT	30 (18.6)	161	40 (22.7)	176	0.82 (0.53, 1.29)	0.392	
	COT	38 (18.4)	206	28 (15.4)	182	1.20 (0.79, 1.82)	0.389	
	BOOST NZ	7 (15.2)	46	8 (17.4)	46	0.91 (0.47, 1.79)	0.788	
	BOOST II UK	29 (21.0)	138	29 (21.3)	136	0.98 (0.62, 1.57)	0.947	
	BOOST II AUS	20 (14.5)	138	21 (15.6)	135	0.94 (0.54, 1.65)	0.834	
	NeOProM	**124 (18.0)**	**689**	**126 (18.7)**	**675**	**0.98 (0.78, 1.22)**	**0.853**	
start<6 hrs	SUPPORT	125 (19.6)	638	100 (15.5)	645	1.29 (1.01, 1.65)	0.043	0.169
	COT	3 (11.1)	27	3 (11.5)	26	0.96 (0.21, 4.35)	0.932	
	BOOST NZ	3 (10.7)	28	2 (7.1)	28	1.47 (0.30, 7.07)	0.633	
	BOOST II UK		.		.		.	
	BOOST II AUS	13 (22.0)	59	6 (10.0)	60	1.78 (0.75, 4.21)	0.191	
	NeOProM	**144 (19.1)**	**752**	**111 (14.6)**	**759**	**1.33 (1.05, 1.68)**	**0.016**	
>=6 hrs	SUPPORT	0	5	1 (20.0)	5		***	
	COT	92 (16.0)	575	84 (14.7)	573	1.09 (0.84, 1.43)	0.512	
	BOOST NZ	18 (12.7)	142	21 (14.9)	141	0.86 (0.51, 1.46)	0.573	

eTable 17. Death prior to discharge, by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	BOOST II UK		.		.		.	
	BOOST II AUS	86 (17.0)	506	76 (15.0)	506	1.13 (0.85, 1.51)	0.389	
	NeOProM	**196 (16.0)**	**1228**	**182 (14.9)**	**1225**	**1.08 (0.90, 1.29)**	**0.419**	
Original	SUPPORT	130 (19.9)	654	107 (16.2)	662	1.26 (0.99, 1.60)	0.060	0.040
software	COT	48 (16.8)	286	48 (17.3)	278	0.98 (0.69, 1.40)	0.925	
	BOOST NZ	21 (12.4)	170	24 (14.1)	170	0.89 (0.54, 1.47)	0.643	
	BOOST II UK	20 (17.7)	113	29 (25.4)	114	0.67 (0.40, 1.12)	0.129	
	BOOST II AUS	57 (16.5)	346	56 (16.2)	346	1.03 (0.74, 1.43)	0.880	
	NeOProM	**276 (17.6)**	**1569**	**264 (16.8)**	**1570**	**1.05 (0.90, 1.23)**	**0.503**	
Revised	SUPPORT		.		.		.	
software	COT	45 (15.8)	284	37 (13.3)	279	1.19 (0.80, 1.77)	0.396	
	BOOST NZ		.		.		.	
	BOOST II UK	95 (25.6)	371	67 (18.2)	369	1.41 (1.07, 1.86)	0.016	
	BOOST II AUS	42 (18.9)	222	27 (12.2)	221	1.55 (1.00, 2.41)	0.051	
	NeOProM	**182 (20.8)**	**877**	**131 (15.1)**	**869**	**1.38 (1.12, 1.69)**	**0.002**	
SGA:	SUPPORT	107 (17.5)	613	93 (15.3)	607	1.16 (0.90, 1.51)	0.254	0.278
Trialist	COT	81 (14.8)	548	73 (13.3)	548	1.10 (0.83, 1.47)	0.501	
defined -	BOOST II NZ	20 (13.1)	153	21 (13.4)	157	0.98 (0.57, 1.69)	0.949	
No	BOOST II UK	94 (23.1)	407	77 (18.9)	408	1.22 (0.93, 1.58)	0.149	
	BOOST II AUS	75 (15.4)	487	69 (14.1)	489	1.09 (0.81, 1.48)	0.570	
	NeOProM	**377 (17.1)**	**2208**	**333 (15.1)**	**2209**	**1.14 (0.99, 1.30)**	**0.063**	
Yes	SUPPORT	23 (56.1)	41	14 (25.5)	55	2.18 (1.29, 3.70)	0.004	
	COT	14 (25.9)	54	14 (27.5)	51	0.95 (0.51, 1.74)	0.856	
	BOOST II NZ	1 (5.9)	17	3 (23.1)	13	0.25 (0.03, 2.11)	0.200	
	BOOST II UK	20 (26.7)	75	17 (23.6)	72	1.13 (0.65, 1.98)	0.567	
	BOOST II AUS	24 (30.0)	80	14 (17.9)	78	1.67 (0.94, 2.99)	0.457	
	NeOProM	**82 (30.7)**	**267**	**62 (23.0)**	**269**	**1.37 (1.04, 1.81)**	**0.034**	
SGA:	SUPPORT	101 (18.0)	560	79 (14.5)	546	1.27 (0.96, 1.66)	0.093	0.934
NeOProM	COT	81 (14.8)	548	73 (13.3)	548	1.10 (0.83, 1.47)	0.501	
defined -	BOOST II NZ	20 (13.1)	153	21 (13.4)	157	0.98 (0.57, 1.69)	0.949	
No	BOOST II UK	98 (23.0)	427	79 (18.5)	427	1.23 (0.94, 1.61)	0.125	
	BOOST II AUS	75 (15.4)	487	69 (14.1)	489	1.09 (0.81, 1.48)	0.570	
	NeOProM	**375 (17.2)**	**2175**	**321 (14.8)**	**2167**	**1.16 (1.02, 1.34)**	**0.028**	
Yes	SUPPORT	29 (30.9)	94	28 (24.1)	116	1.30 (0.83, 2.03)	0.249	
	COT	14 (25.9)	54	14 (27.5)	51	0.95 (0.51, 1.74)	0.856	
	BOOST II NZ	1 (5.9)	17	3 (23.1)	13	0.25 (0.03, 2.11)	0.200	
	BOOST II UK	17 (29.8)	57	17 (30.4)	56	0.93 (0.51, 1.68)	0.799	
	BOOST II AUS	24 (30.0)	80	14 (17.9)	78	1.67 (0.94, 2.99)	0.457	
	NeOProM	**85 (28.1)**	**302**	**76 (24.2)**	**314**	**1.14 (0.87, 1.49)**	**0.341**	

* Analysis adjusted for trials and multiple births

Abbreviations/definitions

CI: confidence interval; RR: relative risk; GA: gestational age; SUPPORT: Surfactant Positive Airway Pressure and Pulse Oximetry Trial; COT: Canadian Oxygen Trial; BOOST: Benefits of Oxygen Saturation Targeting; NZ: New Zealand; UK: United Kingdom; AUS: Australia; NeOProM: Neonatal Oxygenation Prospective Meta-analysis; inborn: born inside the treating center; outborn: born outside the treating center (e.g. transferred from another hospital; vaginal: mode of delivery through the vagina; Caesarean: mode of delivery via surgical procedure; ANS: antenatal corticosteroids; singleton: child born as a single birth; multiple: more than one child per birth; start<6 hrs: intervention commenced less than 6 hours after birth; start>=6 hrs: intervention commenced greater than or equal to 6 hours after birth; original software: original oximeter software; revised software: revised oximeter software; SGA: small for gestational age; SGA NeOProM defined: small for gestational age as per definition used by NeOProM collaboration, i.e. less than 10th percentile using charts from Kramer et al.[1]

The subgroup analysis by oximeter software type (original vs revised) excludes n=74 infants in COT who were exposed to both the original and revised software.

Empty cells (.) indicate data not collected or not applicable in this trial.

*** Low / no event rate(s) makes parameter not estimable.

eTable 18. Bayley-III language and/or cognitive <85, by subgroups

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
GA<26 wks	SUPPORT	86 (50.9)	169	116 (58.9)	197	0.86 (0.71, 1.05)	0.130	0.384
	COT	81 (44.0)	184	81 (44.8)	181	0.97 (0.78, 1.21)	0.790	
	BOOST NZ	13 (32.5)	40	14 (31.8)	44	1.67 (0.81, 3.46)	0.167	
	BOOST II UK	33 (38.4)	86	33 (36.7)	90	1.05 (0.71, 1.55)	0.794	
	BOOST II AUS	54 (35.8)	151	56 (32.7)	171	1.06 (0.79, 1.41)	0.701	
	NeOProM	**267 (42.4)**	**630**	**300 (43.9)**	**683**	**0.96 (0.85, 1.08)**	**0.482**	
GA>=26 wks	SUPPORT	135 (44.6)	303	136 (44.2)	308	1.02 (0.85, 1.23)	0.846	
	COT	108 (37.2)	290	109 (36.7)	297	0.99 (0.81, 1.21)	0.911	
	BOOST NZ	21 (27.6)	76	23 (32.9)	70	0.73 (0.44, 1.23)	0.235	
	BOOST II UK	46 (28.9)	159	45 (26.6)	169	1.13 (0.81, 1.57)	0.481	
	BOOST II AUS	70 (27.5)	255	59 (23.1)	255	1.20 (0.90, 1.60)	0.217	
	NeOProM	**380 (35.1)**	**1083**	**372 (33.8)**	**1099**	**1.03 (0.92, 1.15)**	**0.619**	
Inborn	SUPPORT	221 (46.8)	472	252 (49.9)	505	0.94 (0.82, 1.08)	0.380	0.525
	COT	176 (40.0)	440	175 (40.0)	437	0.98 (0.84, 1.14)	0.785	
	BOOST NZ	33 (30.0)	110	36 (33.0)	109	0.92 (0.61, 1.36)	0.665	
	BOOST II UK	71 (32.4)	219	71 (30.7)	231	1.08 (0.83, 1.41)	0.551	
	BOOST II AUS	117 (31.0)	377	110 (27.2)	405	1.12 (0.91, 1.38)	0.283	
	NeOProM	**618 (38.2)**	**1618**	**644 (38.2)**	**1687**	**0.99 (0.91, 1.08)**	**0.816**	
Outborn	SUPPORT		.		.		.	
	COT	13 (38.2)	34	15 (36.6)	41	1.05 (0.58, 1.88)	0.857	
	BOOST NZ	1 (16.7)	6	1 (20.0)	5	0.83 (0.07, 10.2)	0.887	
	BOOST II UK	8 (30.8)	26	7 (25.0)	28	1.33 (0.53, 3.34)	0.551	
	BOOST II AUS	7 (24.1)	29	5 (23.8)	21	0.86 (0.33, 2.29)	0.769	
	NeOProM	**29 (30.5)**	**95**	**28 (29.5)**	**95**	**1.15 (0.75, 1.75)**	**0.521**	
Vaginal	SUPPORT	59 (40.4)	146	78 (44.8)	174	0.89 (0.68, 1.15)	0.369	0.331
	COT	80 (45.7)	175	70 (36.5)	192	1.25 (0.98, 1.60)	0.067	
	BOOST NZ	12 (25.5)	47	17 (33.3)	51	1.81 (0.66, 4.97)	0.250	
	BOOST II UK	46 (31.7)	145	44 (29.9)	147	1.08 (0.76, 1.52)	0.673	
	BOOST II AUS	57 (29.8)	191	55 (28.8)	191	1.01 (0.74, 1.38)	0.929	
	NeOProM	**254 (36.1)**	**704**	**264 (35.0)**	**755**	**1.05 (0.91, 1.20)**	**0.498**	
Caesarean	SUPPORT	162 (49.7)	326	174 (52.6)	331	0.95 (0.81, 1.11)	0.524	
	COT	109 (36.5)	299	119 (41.8)	285	0.85 (0.71, 1.02)	0.078	
	BOOST NZ	22 (31.9)	69	20 (31.7)	63	0.97 (0.58, 1.64)	0.924	
	BOOST II UK	33 (33.0)	100	34 (30.4)	112	1.12 (0.77, 1.63)	0.538	
	BOOST II AUS	66 (30.8)	214	59 (25.3)	233	1.21 (0.92, 1.60)	0.169	
	NeOProM	**392 (38.9)**	**1008**	**406 (39.6)**	**1024**	**0.96 (0.87, 1.07)**	**0.469**	
ANS - No	SUPPORT	7 (41.2)	17	12 (50.0)	24	0.79 (0.39, 1.58)	0.500	0.291
	COT	23 (50.0)	46	26 (61.9)	42	0.66 (0.30, 1.44)	0.295	
	BOOST NZ	5 (38.5)	13	4 (40.0)	10	0.96 (0.35, 2.68)	0.959	
	BOOST II UK	4 (25.0)	16	7 (38.9)	18	0.68 (0.26, 1.77)	0.429	

eTable 18. Bayley-III language and/or cognitive <85, by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	BOOST II AUS	12 (29.3)	41	8 (29.6)	27	0.92 (0.43, 2.00)	0.843	
	NeOProM	**51 (38.3)**	**133**	**57 (47.1)**	**121**	**0.88 (0.66, 1.16)**	**0.356**	
ANS - Yes	SUPPORT	214 (47.0)	455	240 (49.9)	481	0.95 (0.83, 1.09)	0.462	
	COT	165 (38.6)	427	164 (37.6)	436	1.01 (0.86, 1.18)	0.940	
	BOOST NZ	29 (28.2)	103	33 (31.7)	104	0.90 (0.58, 1.38)	0.621	
	BOOST II UK	75 (32.9)	228	70 (29.3)	239	1.15 (0.88, 1.51)	0.296	
	BOOST II AUS	110 (30.3)	363	107 (27.1)	395	1.09 (0.88, 1.34)	0.434	
	NeOProM	**593 (37.6)**	**1576**	**614 (37.1)**	**1655**	**1.00 (0.92, 1.09)**	**0.931**	
Male	SUPPORT	127 (53.8)	236	158 (56.8)	278	0.95 (0.80, 1.11)	0.505	0.449
	COT	123 (47.5)	259	114 (46.3)	246	0.99 (0.83, 1.18)	0.903	
	BOOST NZ	22 (37.9)	58	27 (45.8)	59	0.84 (0.55, 1.31)	0.448	
	BOOST II UK	46 (37.4)	123	44 (33.6)	131	1.20 (0.87, 1.67)	0.265	
	BOOST II AUS	83 (41.3)	201	69 (32.5)	212	1.29 (1.01, 1.65)	0.043	
	NeOProM	**401 (45.7)**	**877**	**412 (44.5)**	**926**	**1.03 (0.93, 1.13)**	**0.618**	
Female	SUPPORT	94 (39.8)	236	94 (41.4)	227	0.95 (0.76, 1.19)	0.651	
	COT	66 (30.7)	215	76 (32.8)	232	0.93 (0.72, 1.22)	0.614	
	BOOST NZ	12 (20.7)	58	10 (18.2)	55	1.14 (0.54, 2.42)	0.612	
	BOOST II UK	33 (27.0)	122	34 (26.6)	128	0.98 (0.67, 1.42)	0.899	
	BOOST II AUS	41 (20.0)	205	46 (21.5)	214	0.92 (0.64, 1.32)	0.652	
	NeOProM	**246 (29.4)**	**836**	**260 (30.4)**	**856**	**0.94 (0.82, 1.09)**	**0.416**	
Singleton	SUPPORT	166 (47.3)	351	184 (48.5)	379	0.97 (0.84, 1.13)	0.735	0.180
	COT	134 (41.7)	321	126 (38.2)	330	1.09 (0.91, 1.32)	0.354	
	BOOST NZ	24 (28.2)	85	25 (28.7)	87	0.98 (0.61, 1.58)	0.942	
	BOOST II UK	47 (28.7)	164	54 (29.5)	183	0.97 (0.70, 1.35)	0.862	
	BOOST II AUS	93 (30.5)	305	86 (26.4)	326	1.16 (0.90, 1.48)	0.253	
	NeOProM	**464 (37.8)**	**1226**	**475 (36.4)**	**1305**	**1.03 (0.94, 1.14)**	**0.512**	
Multiple	SUPPORT	55 (45.5)	121	68 (54.0)	126	0.82 (0.61, 1.10)	0.192	
	COT	55 (35.9)	153	64 (43.2)	148	0.82 (0.65, 1.04)	0.105	
	BOOST NZ	10 (32.3)	31	12 (44.4)	27	0.81 (0.44, 1.48)	0.492	
	BOOST II UK	32 (39.5)	81	24 (31.6)	76	1.29 (0.88, 1.90)	0.189	
	BOOST II AUS	31 (30.7)	101	29 (29.0)	100	1.04 (0.73, 1.49)	0.808	
	NeOProM	**183 (37.6)**	**487**	**197 (41.3)**	**477**	**0.92 (0.79, 1.06)**	**0.251**	
start<6 hrs	SUPPORT	216 (46.9)	461	248 (50.1)	495	0.94 (0.82, 1.08)	0.372	0.443
	COT	6 (27.3)	22	10 (47.6)	21	0.57 (0.25, 1.32)	0.191	
	BOOST NZ	13 (59.1)	22	6 (28.6)	21	2.24 (0.51, 9.88)	0.287	
	BOOST II UK		.		.		.	
	BOOST II AUS	13 (33.3)	39	14 (28.6)	49	1.14 (0.60, 2.18)	0.687	
	NeOProM	**248 (45.6)**	**544**	**278 (47.4)**	**586**	**0.95 (0.84, 1.08)**	**0.465**	
>=6 hrs	SUPPORT	2 (40.0)	5	0	4		***	
	COT	183 (40.5)	452	180 (39.4)	457	1.01 (0.87, 1.17)	0.934	
	BOOST NZ	21 (22.3)	94	31 (33.3)	93	0.68 (0.42, 1.10)	0.118	

eTable 18. Bayley-III language and/or cognitive <85, by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	BOOST II UK		.		.		.	
	BOOST II AUS	111 (30.3)	366	101 (26.8)	377	1.14 (0.92, 1.41)	0.243	
	NeOProM	**317 (34.6)**	**917**	**312 (33.5)**	**931**	**1.02 (0.91, 1.15)**	**0.750**	
Original	SUPPORT	221 (46.8)	472	252 (49.9)	505	0.94 (0.82, 1.08)	0.380	0.277
software	COT	83 (37.6)	221	88 (41.1)	214	0.90 (0.72, 1.12)	0.330	
	BOOST NZ	34 (29.3)	116	37 (32.5)	114	0.91 (0.61, 1.35)	0.641	
	BOOST II UK	24 (44.4)	54	18 (31.0)	58	1.52 (0.90, 2.58)	0.120	
	BOOST II AUS	73 (29.0)	252	69 (26.2)	263	1.08 (0.83, 1.41)	0.574	
	NeOProM	**435 (39.0)**	**1115**	**464 (40.2)**	**1154**	**0.97 (0.88, 1.07)**	**0.521**	
Revised	SUPPORT		.		.		.	
software	COT	93 (41.5)	224	85 (37.4)	227	1.06 (0.85, 1.32)	0.590	
	BOOST NZ		.		.		.	
	BOOST II UK	55 (28.8)	191	60 (29.9)	201	0.98 (0.73, 1.31)	0.888	
	BOOST II AUS	51 (33.1)	154	46 (28.2)	163	1.20 (0.87, 1.67)	0.264	
	NeOProM	**199 (35.0)**	**569**	**191 (32.3)**	**591**	**1.06 (0.91, 1.24)**	**0.422**	
SGA:	SUPPORT	212 (46.5)	456	227 (48.6)	467	0.95 (0.83, 1.10)	0.502	0.768
Trialist	COT	170 (39.1)	435	173 (39.1)	443	0.98 (0.84, 1.14)	0.770	
defined -	BOOST II NZ	26 (25.7)	101	34 (32.1)	106	0.79 (0.53, 1.18)	0.253	
No	BOOST II UK	69 (32.7)	211	64 (28.8)	222	1.18 (0.89, 1.56)	0.252	
	BOOST II AUS	103 (28.9)	356	98 (26.6)	368	1.09 (0.87, 1.36)	0.451	
	NeOProM	**580 (37.2)**	**1559**	**596 (37.1)**	**1606**	**0.99 (0.91, 1.08)**	**0.867**	
Yes	SUPPORT	9 (56.3)	16	25 (65.8)	38	0.86 (0.53, 1.41)	0.558	
	COT	19 (48.7)	39	17 (48.6)	35	1.00 (0.63, 1.60)	0.995	
	BOOST II NZ	8 (53.3)	15	3 (37.5)	8	1.28 (0.47, 3.47)	0.626	
	BOOST II UK	10 (30.3)	33	14 (37.8)	37	1.33 (0.88, 2.02)	0.172	
	BOOST II AUS	21 (42.0)	50	17 (29.3)	58	1.43 (0.86, 2.40)	0.171	
	NeOProM	**67 (43.8)**	**153**	**76 (43.2)**	**176**	**1.03 (0.80, 1.31)**	**0.828**	
SGA:	SUPPORT	187 (45.4)	412	203 (47.7)	426	0.95 (0.82, 1.10)	0.509	0.837
NeOProM	COT	170 (39.1)	435	173 (39.1)	443	0.98 (0.84, 1.14)	0.770	
defined -	BOOST II NZ	26 (25.7)	101	34 (32.1)	106	0.79 (0.53, 1.18)	0.253	
No	BOOST II UK	72 (32.6)	221	69 (29.5)	234	1.15 (0.88, 1.51)	0.306	
	BOOST II AUS	103 (28.9)	356	98 (26.6)	368	1.09 (0.87, 1.36)	0.451	
	NeOProM	**558 (36.6)**	**1525**	**577 (36.6)**	**1577**	**0.99 (0.91, 1.08)**	**0.838**	
Yes	SUPPORT	34 (56.7)	60	49 (62.0)	79	0.91 (0.68, 1.22)	0.538	
	COT	19 (48.7)	39	17 (48.6)	35	1.00 (0.63, 1.60)	0.995	
	BOOST II NZ	8 (53.3)	15	3 (37.5)	8	1.28 (0.47, 3.47)	0.626	
	BOOST II UK	7 (29.2)	24	9 (36.0)	25	1.29 (0.75, 2.22)	0.364	
	BOOST II AUS	21 (42.0)	50	17 (29.3)	58	1.43 (0.86, 2.40)	0.171	
	NeOProM	**89 (47.3)**	**188**	**95 (46.3)**	**205**	**1.04 (0.84, 1.28)**	**0.740**	

* Analysis adjusted for trials and multiple births

Abbreviations/definitions

CI: confidence interval; RR: relative risk; GA: gestational age; SUPPORT: Surfactant Positive Airway Pressure and Pulse Oximetry Trial; COT: Canadian Oxygen Trial; BOOST: Benefits of Oxygen Saturation Targeting; NZ: New Zealand; UK: United Kingdom; AUS: Australia; NeOProM: Neonatal Oxygenation Prospective Meta-analysis; inborn: born inside the treating center; outborn: born outside the treating center (e.g. transferred from another hospital; vaginal: mode of delivery through the vagina; Caesarean: mode of delivery via surgical procedure; ANS: antenatal corticosteroids; singleton: child born as a single birth; multiple: more than one child per birth; start<6 hrs: intervention commenced less than 6 hours after birth; start>=6 hrs: intervention commenced greater than or equal to 6 hours after birth; original software: original oximeter software; revised software: revised oximeter software; SGA: small for gestational age; SGA NeOProM defined: small for gestational age as per definition used by NeOProM collaboration, i.e. less than 10th percentile using charts from Kramer et al.[1]

The subgroup analysis by oximeter software type (original vs revised) excludes n=74 infants in COT who were exposed to both the original and revised software.
These analyses exclude infants in SUPPORT and COT where values of Bayley-III were imputed for infants who had unsuccessful Bayley-III assessments due to severe developmental delay or autism.

Empty cells (.) indicate data not collected or not applicable in this trial.

*** Low / no event rate(s) makes parameter not estimable.

eTable 19. Bayley-III cognitive <85, by subgroups

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
GA<26 wks	SUPPORT	45 (26.6)	169	67 (34.2)	196	0.77 (0.55, 1.06)	0.111	0.168
	COT	43 (23.4)	184	46 (25.4)	181	0.91 (0.65, 1.27)	0.576	
	BOOST NZ	9 (22.5)	40	3 (6.8)	44	3.30 (0.96, 11.34)	0.150	
	BOOST II UK	23 (26.7)	86	23 (25.6)	90	1.08 (0.65, 1.80)	0.769	
	BOOST II AUS	31 (20.5)	151	31 (18.1)	171	1.08 (0.69, 1.67)	0.741	
	NeOProM	**151 (24.0)**	**630**	**170 (24.9)**	**682**	**0.95 (0.78, 1.14)**	**0.554**	
GA>=26 wks	SUPPORT	60 (19.9)	302	65 (21.2)	307	0.99 (0.71, 1.38)	0.937	
	COT	48 (16.6)	289	40 (13.5)	297	1.19 (0.80, 1.78)	0.392	
	BOOST NZ	11 (14.5)	76	9 (12.9)	70	0.46 (0.10, 2.18)	0.330	
	BOOST II UK	30 (18.9)	159	26 (15.4)	169	1.25 (0.76, 2.05)	0.377	
	BOOST II AUS	33 (12.9)	255	21 (8.2)	255	1.55 (0.95, 2.54)	0.079	
	NeOProM	**182 (16.8)**	**1081**	**161 (14.7)**	**1098**	**1.15 (0.94, 1.40)**	**0.182**	
Inborn	SUPPORT	105 (22.3)	471	132 (26.2)	503	0.87 (0.69, 1.10)	0.231	0.709
	COT	83 (18.9)	439	77 (17.6)	437	1.05 (0.80, 1.39)	0.724	
	BOOST NZ	19 (17.3)	110	11 (10.1)	109	0.65 (0.27, 1.54)	0.325	
	BOOST II UK	47 (21.5)	219	45 (19.5)	231	1.15 (0.79, 1.67)	0.469	
	BOOST II AUS	62 (16.4)	377	51 (12.6)	405	1.27 (0.91, 1.77)	0.161	
	NeOProM	**316 (19.6)**	**1616**	**316 (18.8)**	**1685**	**1.04 (0.90, 1.19)**	**0.623**	
Outborn	SUPPORT		.		.		.	
	COT	8 (23.5)	34	9 (22.0)	41	1.07 (0.55, 2.09)	0.844	
	BOOST NZ	1 (16.7)	6	1 (20.0)	5	0.83 (0.07, 10.2)	0.887	
	BOOST II UK	6 (23.1)	26	4 (14.3)	28	1.97 (0.56, 6.99)	0.292	
	BOOST II AUS	2 (6.9)	29	1 (4.8)	21	1.43 (0.15, 13.2)	0.754	
	NeOProM	**17 (17.9)**	**95**	**15 (15.8)**	**95**	**1.25 (0.71, 2.18)**	**0.440**	
Vaginal	SUPPORT	25 (17.2)	145	46 (26.6)	173	0.58 (0.37, 0.91)	0.018	0.735
	COT	47 (27.0)	174	42 (21.9)	192	1.23 (0.87, 1.75)	0.239	
	BOOST NZ	9 (19.1)	47	4 (7.8)	51	2.44 (0.81, 7.40)	0.277	
	BOOST II UK	27 (18.6)	145	30 (20.4)	147	0.93 (0.59, 1.48)	0.771	
	BOOST II AUS	29 (15.2)	191	22 (11.5)	191	1.29 (0.77, 2.16)	0.342	
	NeOProM	**137 (19.5)**	**702**	**144 (19.1)**	**754**	**1.02 (0.83, 1.25)**	**0.877**	
Caesarean	SUPPORT	80 (24.5)	326	86 (26.1)	330	0.97 (0.74, 1.28)	0.841	
	COT	44 (14.7)	299	44 (15.4)	285	0.93 (0.63, 1.36)	0.692	
	BOOST NZ	11 (15.9)	69	8 (12.7)	63	0.48 (0.11, 2.03)	0.315	
	BOOST II UK	26 (26.0)	100	19 (17.0)	112	1.56 (0.89, 2.71)	0.117	
	BOOST II AUS	34 (15.9)	214	29 (12.4)	233	1.26 (0.82, 1.93)	0.294	
	NeOProM	**195 (19.3)**	**1008**	**186 (18.2)**	**1023**	**1.07 (0.89, 1.28)**	**0.495**	
ANS - No	SUPPORT	6 (35.3)	17	8 (33.3)	24	1.06 (0.45, 2.49)	0.896	0.132
	COT	12 (26.1)	46	16 (38.1)	42	0.67 (0.36, 1.28)	0.230	
	BOOST NZ	1 (7.7)	13	2 (20.0)	10	0.72 (0.13, 4.08)	0.713	
	BOOST II UK	1 (6.3)	16	3 (16.7)	18	0.38 (0.05, 3.22)	0.376	

eTable 19. Bayley-III cognitive <85, by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	BOOST II AUS	6 (14.6)	41	5 (18.5)	27	0.77 (0.26, 2.29)	0.633	
	NeOProM	**26 (19.5)**	**133**	**34 (28.1)**	**121**	**0.87 (0.50, 1.50)**	**0.605**	
ANS - Yes	SUPPORT	99 (21.8)	454	124 (25.9)	479	0.87 (0.68, 1.10)	0.246	
	COT	79 (18.5)	426	70 (16.1)	436	1.12 (0.84, 1.50)	0.429	
	BOOST NZ	19 (18.4)	103	10 (9.6)	104	0.94 (0.46, 1.91)	0.860	
	BOOST II UK	52 (22.8)	228	45 (18.8)	239	1.25 (0.87, 1.82)	0.230	
	BOOST II AUS	58 (16.0)	363	47 (11.9)	395	1.28 (0.91, 1.81)	0.154	
	NeOProM	**307 (19.5)**	**1574**	**296 (17.9)**	**1653**	**1.08 (0.93, 1.24)**	**0.314**	
Male	SUPPORT	65 (27.5)	236	84 (30.2)	278	0.91 (0.69, 1.21)	0.514	0.844
	COT	57 (22.0)	259	56 (22.8)	246	0.95 (0.68, 1.30)	0.731	
	BOOST NZ	12 (20.7)	58	9 (15.3)	59	0.90 (0.40, 2.04)	0.798	
	BOOST II UK	30 (24.4)	123	28 (21.4)	131	1.19 (0.74, 1.90)	0.471	
	BOOST II AUS	46 (22.9)	201	34 (16.0)	212	1.36 (0.93, 2.00)	0.112	
	NeOProM	**210 (23.9)**	**877**	**211 (22.8)**	**926**	**1.04 (0.88, 1.23)**	**0.668**	
Female	SUPPORT	40 (17.0)	235	48 (21.3)	225	0.78 (0.53, 1.16)	0.218	
	COT	34 (15.9)	214	30 (12.9)	232	1.28 (0.80, 2.03)	0.307	
	BOOST NZ	8 (13.8)	58	3 (5.5)	55	2.53 (0.71, 9.05)	0.009	
	BOOST II UK	23 (18.9)	122	21 (16.4)	128	1.18 (0.70, 2.01)	0.537	
	BOOST II AUS	18 (8.8)	205	18 (8.4)	214	1.00 (0.55, 1.80)	0.996	
	NeOProM	**123 (14.7)**	**834**	**120 (14.1)**	**854**	**1.08 (0.84, 1.38)**	**0.540**	
Singleton	SUPPORT	78 (22.3)	350	98 (26.0)	377	0.86 (0.66, 1.11)	0.245	0.687
	COT	63 (19.7)	320	59 (17.9)	330	1.10 (0.80, 1.52)	0.555	
	BOOST NZ	15 (17.6)	85	7 (8.0)	87	2.19 (0.94, 5.11)	0.069	
	BOOST II UK	29 (17.7)	164	31 (16.9)	183	1.04 (0.66, 1.65)	0.855	
	BOOST II AUS	49 (16.1)	305	38 (11.7)	326	1.38 (0.93, 2.04)	0.110	
	NeOProM	**234 (19.1)**	**1224**	**233 (17.9)**	**1303**	**1.06 (0.90, 1.25)**	**0.490**	
Multiple	SUPPORT	27 (22.3)	121	34 (27.0)	126	0.90 (0.52, 1.56)	0.712	
	COT	28 (18.3)	153	27 (18.2)	148	0.96 (0.61, 1.50)	0.842	
	BOOST NZ	5 (16.1)	31	5 (18.5)	27	0.72 (0.36, 1.41)	0.336	
	BOOST II UK	24 (29.6)	81	18 (23.7)	76	1.30 (0.79, 2.16)	0.304	
	BOOST II AUS	15 (14.9)	101	14 (14.0)	100	0.99 (0.55, 1.75)	0.960	
	NeOProM	**99 (20.3)**	**487**	**98 (20.5)**	**477**	**1.00 (0.78, 1.28)**	**0.993**	
start<6 hrs	SUPPORT	103 (22.4)	460	130 (26.4)	493	0.86 (0.68, 1.10)	0.230	0.250
	COT	3 (13.6)	22	4 (19.0)	21	0.73 (0.19, 2.80)	0.644	
	BOOST NZ	10 (45.5)	22	2 (9.5)	21	4.77 (1.18, 19.27)	0.232	
	BOOST II UK		.		.		.	
	BOOST II AUS	8 (20.5)	39	6 (12.2)	49	1.68 (0.63, 4.43)	0.123	
	NeOProM	**124 (22.8)**	**543**	**142 (24.3)**	**584**	**0.93 (0.75, 1.16)**	**0.525**	
>=6 hrs	SUPPORT	1 (20.0)	5	0	4		***	
	COT	88 (19.5)	451	82 (17.9)	457	1.07 (0.82, 1.39)	0.638	
	BOOST NZ	10 (10.6)	94	10 (10.8)	93	0.75 (0.31, 1.82)	0.528	

eTable 19. Bayley-III cognitive <85, by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	BOOST II UK		.		.		.	
	BOOST II AUS	56 (15.3)	366	46 (12.2)	377	1.24 (0.88, 1.75)	0.213	
	NeOProM	**155 (16.9)**	**916**	**138 (14.8)**	**931**	**1.12 (0.91, 1.37)**	**0.282**	
Original	SUPPORT	105 (22.3)	471	132 (26.2)	503	0.87 (0.69, 1.10)	0.231	0.561
software	COT	43 (19.5)	221	41 (19.2)	214	1.02 (0.70, 1.48)	0.925	
	BOOST NZ	20 (17.2)	116	12 (10.5)	114	0.65 (0.28, 1.52)	0.320	
	BOOST II UK	15 (27.8)	54	11 (19.0)	58	1.70 (0.78, 3.70)	0.180	
	BOOST II AUS	36 (14.3)	252	31 (11.8)	263	1.18 (0.77, 1.82)	0.450	
	NeOProM	**219 (19.7)**	**1114**	**227 (19.7)**	**1152**	**1.02 (0.86, 1.21)**	**0.798**	
Revised	SUPPORT		.		.		.	
software	COT	44 (19.6)	224	38 (16.7)	227	1.10 (0.75, 1.63)	0.617	
	BOOST NZ		.		.		.	
	BOOST II UK	38 (19.9)	191	38 (18.9)	201	1.05 (0.70, 1.58)	0.809	
	BOOST II AUS	28 (18.2)	154	21 (12.9)	163	1.38 (0.83, 2.28)	0.211	
	NeOProM	**110 (19.3)**	**569**	**97 (16.4)**	**591**	**1.13 (0.88, 1.44)**	**0.338**	
SGA:	SUPPORT	99 (21.8)	455	113 (24.3)	465	0.91 (0.71, 1.17)	0.478	0.734
Trialist	COT	84 (19.4)	434	80 (18.1)	443	1.04 (0.79, 1.36)	0.798	
defined -	BOOST II NZ	15 (14.9)	101	10 (9.4)	106	1.20 (0.94, 1.53)	0.134	
No	BOOST II UK	43 (20.4)	211	41 (18.5)	222	1.21 (0.82, 1.77)	0.342	
	BOOST II AUS	54 (15.2)	356	43 (11.7)	368	1.28 (0.89, 1.83)	0.185	
	NeOProM	**295 (18.9)**	**1557**	**287 (17.9)**	**1604**	**1.05 (0.91, 1.22)**	**0.488**	
Yes	SUPPORT	6 (37.5)	16	19 (50.0)	38	0.73 (0.36, 1.48)	0.383	
	COT	7 (17.9)	39	6 (17.1)	35	1.05 (0.40, 2.73)	0.928	
	BOOST II NZ	5 (33.3)	15	2 (25.0)	8	1.25 (0.31, 5.09)	0.756	
	BOOST II UK	10 (30.3)	33	8 (21.6)	37	2.33 (1.26, 4.31)	0.007	
	BOOST II AUS	10 (20.0)	50	9 (15.5)	58	1.29 (0.57, 2.92)	0.543	
	NeOProM	**38 (24.8)**	**153**	**44 (25.0)**	**176**	**1.05 (0.73, 1.52)**	**0.782**	
SGA:	SUPPORT	87 (21.2)	411	98 (23.1)	424	0.94 (0.72, 1.24)	0.680	0.392
NeOProM	COT	84 (19.4)	434	80 (18.1)	443	1.04 (0.79, 1.36)	0.798	
defined -	BOOST II NZ	15 (14.9)	101	10 (9.4)	106	1.20 (0.94, 1.53)	0.134	
No	BOOST II UK	46 (20.8)	221	45 (19.2)	234	1.15 (0.79, 1.69)	0.459	
	BOOST II AUS	54 (15.2)	356	43 (11.7)	368	1.28 (0.89, 1.83)	0.185	
	NeOProM	**286 (18.8)**	**1523**	**276 (17.5)**	**1575**	**1.06 (0.92, 1.23)**	**0.417**	
Yes	SUPPORT	18 (30.0)	60	34 (43.0)	79	0.70 (0.44, 1.11)	0.125	
	COT	7 (17.9)	39	6 (17.1)	35	1.05 (0.40, 2.73)	0.928	
	BOOST II NZ	5 (33.3)	15	2 (25.0)	8	1.25 (0.31, 5.09)	0.756	
	BOOST II UK	7 (29.2)	24	4 (16.0)	25	2.89 (1.16, 7.19)	0.022	
	BOOST II AUS	10 (20.0)	50	9 (15.5)	58	1.29 (0.57, 2.92)	0.543	
	NeOProM	**47 (25.0)**	**188**	**55 (26.8)**	**205**	**0.92 (0.67, 1.27)**	**0.600**	

* Analysis adjusted for trials and multiple births

Abbreviations/definitions

CI: confidence interval; RR: relative risk; GA: gestational age; SUPPORT: Surfactant Positive Airway Pressure and Pulse Oximetry Trial; COT: Canadian Oxygen Trial; BOOST: Benefits of Oxygen Saturation Targeting; NZ: New Zealand; UK: United Kingdom; AUS: Australia; NeOProM: Neonatal Oxygenation Prospective Meta-analysis; inborn: born inside the treating center; outborn: born outside the treating center (e.g. transferred from another hospital; vaginal: mode of delivery through the vagina; Caesarean: mode of delivery via surgical procedure; ANS: antenatal corticosteroids; singleton: child born as a single birth; multiple: more than one child per birth; start<6 hrs: intervention commenced less than 6 hours after birth; start>=6 hrs: intervention commenced greater than or equal to 6 hours after birth; original software: original oximeter software; revised software: revised oximeter software; SGA: small for gestational age; SGA NeOProM defined: small for gestational age as per definition used by NeOProM collaboration, i.e. less than 10th percentile using charts from Kramer et al.[1]

The subgroup analysis by oximeter software type (original vs revised) excludes n=74 infants in COT who were exposed to both the original and revised software.

Empty cells (.) indicate data not collected or not applicable in this trial.

These analyses exclude infants in SUPPORT and COT where values of Bayley-III were imputed for infants who had unsuccessful Bayley-III assessments due to severe developmental delay or autism.

*** Low / no event rate(s) makes parameter not estimable.

eTable 20. Bayley-III language <85, by subgroups

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
GA<26 wks	SUPPORT	81 (48.2)	168	108 (56.0)	193	0.85 (0.69, 1.04)	0.116	0.354
	COT	76 (41.5)	183	73 (41.5)	176	0.99 (0.78, 1.25)	0.909	
	BOOST NZ	12 (30.0)	40	13 (32.5)	40	1.73 (0.77, 3.91)	0.187	
	BOOST II UK	29 (34.5)	84	25 (28.7)	87	1.21 (0.76, 1.91)	0.425	
	BOOST II AUS	48 (32.9)	146	49 (29.3)	167	1.11 (0.81, 1.51)	0.513	
	NeOProM	**246 (39.6)**	**621**	**268 (40.4)**	**663**	**0.97 (0.85, 1.10)**	**0.623**	
GA>=26 wks	SUPPORT	122 (41.5)	294	117 (38.4)	305	1.08 (0.88, 1.32)	0.470	
	COT	100 (34.7)	288	103 (35.0)	294	0.95 (0.78, 1.16)	0.612	
	BOOST NZ	21 (30.0)	70	19 (28.8)	66	0.86 (0.50, 1.49)	0.586	
	BOOST II UK	42 (26.9)	156	34 (21.3)	160	1.28 (0.88, 1.84)	0.192	
	BOOST II AUS	62 (25.1)	247	54 (21.9)	247	1.15 (0.84, 1.58)	0.371	
	NeOProM	**347 (32.9)**	**1055**	**327 (30.5)**	**1072**	**1.05 (0.93, 1.18)**	**0.432**	
Inborn	SUPPORT	203 (43.9)	462	225 (45.2)	498	0.96 (0.83, 1.12)	0.618	0.532
	COT	164 (37.5)	437	161 (37.5)	429	0.97 (0.82, 1.14)	0.696	
	BOOST NZ	32 (30.8)	104	31 (30.7)	101	0.98 (0.64, 1.49)	0.908	
	BOOST II UK	63 (29.4)	214	54 (24.5)	220	1.22 (0.90, 1.65)	0.197	
	BOOST II AUS	103 (28.3)	364	98 (24.9)	393	1.12 (0.89, 1.40)	0.326	
	NeOProM	**565 (35.7)**	**1581**	**569 (34.7)**	**1641**	**1.01 (0.92, 1.10)**	**0.862**	
Outborn	SUPPORT		.		.		.	
	COT	12 (35.3)	34	15 (36.6)	41	0.96 (0.53, 1.77)	0.904	
	BOOST NZ	1 (16.7)	6	1 (20.0)	5	0.83 (0.07, 10.2)	0.887	
	BOOST II UK	8 (30.8)	26	5 (18.5)	27	1.80 (0.62, 5.21)	0.276	
	BOOST II AUS	7 (24.1)	29	5 (23.8)	21	0.86 (0.33, 2.29)	0.769	
	NeOProM	**28 (29.5)**	**95**	**26 (27.7)**	**94**	**1.18 (0.76, 1.83)**	**0.458**	
Vaginal	SUPPORT	56 (38.9)	144	68 (40.0)	170	0.95 (0.71, 1.25)	0.701	0.414
	COT	71 (41.0)	173	64 (34.0)	188	1.20 (0.92, 1.56)	0.185	
	BOOST NZ	12 (26.7)	45	16 (32.7)	49	1.81 (0.66, 4.94)	0.249	
	BOOST II UK	42 (29.4)	143	32 (23.0)	139	1.26 (0.86, 1.86)	0.239	
	BOOST II AUS	50 (27.6)	181	49 (26.6)	184	1.03 (0.73, 1.43)	0.881	
	NeOProM	**231 (33.7)**	**686**	**229 (31.4)**	**730**	**1.07 (0.93, 1.24)**	**0.345**	
Caesarean	SUPPORT	147 (46.2)	318	157 (47.9)	328	0.97 (0.81, 1.14)	0.685	
	COT	105 (35.2)	298	111 (39.5)	281	0.86 (0.72, 1.04)	0.120	
	BOOST NZ	21 (32.3)	65	16 (28.1)	57	1.06 (0.61, 1.87)	0.827	
	BOOST II UK	29 (29.9)	97	27 (25.0)	108	1.30 (0.84, 1.99)	0.236	
	BOOST II AUS	59 (28.0)	211	53 (23.2)	228	1.20 (0.89, 1.62)	0.229	
	NeOProM	**361 (36.5)**	**989**	**364 (36.3)**	**1002**	**0.99 (0.88, 1.10)**	**0.795**	
ANS - No	SUPPORT	5 (29.4)	17	10 (41.7)	24	0.69 (0.28, 1.67)	0.405	0.394
	COT	22 (47.8)	46	23 (56.1)	41	0.62 (0.27, 1.45)	0.274	
	BOOST NZ	5 (38.5)	13	4 (40.0)	10	0.96 (0.35, 2.68)	0.959	
	BOOST II UK	4 (25.0)	16	4 (25.0)	16	1.03 (0.33, 3.20)	0.957	

eTable 20. Bayley-III language <85, by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	BOOST II AUS	10 (25.6)	39	8 (29.6)	27	0.77 (0.34, 1.75)	0.538	
	NeOProM	**46 (35.1)**	**131**	**49 (41.5)**	**118**	**0.89 (0.66, 1.20)**	**0.446**	
ANS - Yes	SUPPORT	198 (44.5)	445	215 (45.4)	474	0.98 (0.84, 1.13)	0.748	
	COT	153 (36.1)	424	153 (35.7)	429	0.98 (0.83, 1.16)	0.819	
	BOOST NZ	28 (28.9)	97	28 (29.2)	96	0.97 (0.61, 1.53)	0.884	
	BOOST II UK	67 (30.0)	223	54 (23.6)	229	1.30 (0.96, 1.76)	0.091	
	BOOST II AUS	98 (27.8)	352	95 (24.8)	383	1.10 (0.87, 1.38)	0.423	
	NeOProM	**544 (35.3)**	**1541**	**545 (33.8)**	**1611**	**1.02 (0.93, 1.12)**	**0.652**	
Male	SUPPORT	117 (50.9)	230	145 (52.9)	274	0.94 (0.79, 1.13)	0.525	0.395
	COT	117 (45.7)	256	105 (43.6)	241	1.02 (0.84, 1.23)	0.876	
	BOOST NZ	21 (39.6)	53	24 (42.1)	57	0.94 (0.60, 1.48)	0.792	
	BOOST II UK	42 (34.7)	121	34 (27.6)	123	1.33 (0.93, 1.89)	0.120	
	BOOST II AUS	76 (39.0)	195	59 (28.5)	207	1.40 (1.06, 1.83)	0.016	
	NeOProM	**373 (43.6)**	**855**	**367 (40.7)**	**902**	**1.05 (0.94, 1.17)**	**0.353**	
Female	SUPPORT	86 (37.1)	232	80 (35.7)	224	1.02 (0.79, 1.30)	0.900	
	COT	59 (27.4)	215	71 (31.0)	229	0.86 (0.66, 1.13)	0.284	
	BOOST NZ	12 (21.1)	57	8 (16.3)	49	1.29 (0.57, 2.90)	0.621	
	BOOST II UK	29 (24.4)	119	25 (20.2)	124	1.25 (0.80, 1.95)	0.330	
	BOOST II AUS	34 (17.2)	198	44 (21.3)	207	0.80 (0.54, 1.18)	0.259	
	NeOProM	**220 (26.8)**	**821**	**228 (27.4)**	**833**	**0.95 (0.82, 1.11)**	**0.530**	
Singleton	SUPPORT	151 (43.5)	347	167 (44.8)	373	0.97 (0.82, 1.15)	0.735	0.258
	COT	127 (39.8)	319	115 (35.7)	322	1.11 (0.91, 1.36)	0.285	
	BOOST NZ	23 (27.7)	83	22 (26.8)	82	1.03 (0.63, 1.70)	0.899	
	BOOST II UK	41 (25.0)	164	41 (23.3)	176	1.07 (0.74, 1.56)	0.714	
	BOOST II AUS	82 (28.0)	293	77 (24.4)	315	1.14 (0.88, 1.50)	0.321	
	NeOProM	**424 (35.2)**	**1206**	**422 (33.3)**	**1268**	**1.05 (0.94, 1.17)**	**0.377**	
Multiple	SUPPORT	52 (45.2)	115	58 (46.4)	125	0.93 (0.67, 1.28)	0.658	
	COT	49 (32.2)	152	61 (41.2)	148	0.76 (0.60, 0.97)	0.026	
	BOOST NZ	10 (37.0)	27	10 (41.7)	24	0.88 (0.47, 1.65)	0.691	
	BOOST II UK	30 (39.5)	76	18 (25.4)	71	1.54 (1.01, 2.34)	0.046	
	BOOST II AUS	28 (28.0)	100	26 (26.3)	99	1.07 (0.72, 1.58)	0.733	
	NeOProM	**169 (36.0)**	**470**	**173 (37.0)**	**467**	**0.95 (0.81, 1.10)**	**0.480**	
start<6 hrs	SUPPORT	198 (43.8)	452	221 (45.3)	488	0.96 (0.83, 1.11)	0.588	0.551
	COT	6 (27.3)	22	10 (47.6)	21	0.57 (0.25, 1.32)	0.191	
	BOOST NZ	13 (65.0)	20	6 (33.3)	18	2.72 (0.54, 13.8)	0.227	
	BOOST II UK		.		.		.	
	BOOST II AUS	10 (27.0)	37	14 (29.2)	48	0.93 (0.46, 1.87)	0.831	
	NeOProM	**227 (42.7)**	**531**	**251 (43.7)**	**575**	**0.97 (0.84, 1.11)**	**0.629**	
>=6 hrs	SUPPORT	2 (50.0)	4	0	4		***	
	COT	170 (37.9)	449	166 (37.0)	449	0.99 (0.85, 1.16)	0.899	
	BOOST NZ	20 (22.2)	90	26 (29.5)	88	0.74 (0.44, 1.23)	0.239	

eTable 20. Bayley-III language <85, by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	BOOST II UK		.		.		.	
	BOOST II AUS	100 (28.2)	355	89 (24.3)	366	1.17 (0.92, 1.48)	0.196	
	NeOProM	**292 (32.5)**	**898**	**281 (31.0)**	**907**	**1.02 (0.90, 1.16)**	**0.723**	
Original	SUPPORT	203 (43.9)	462	225 (45.2)	498	0.96 (0.83, 1.12)	0.618	0.184
software	COT	78 (35.5)	220	83 (39.2)	212	0.89 (0.71, 1.11)	0.284	
	BOOST NZ	33 (30.0)	110	32 (30.2)	106	0.97 (0.64, 1.47)	0.876	
	BOOST II UK	21 (38.9)	54	13 (24.5)	53	1.72 (0.93, 3.17)	0.083	
	BOOST II AUS	63 (26.3)	240	62 (24.2)	256	1.07 (0.80, 1.43)	0.664	
	NeOProM	**398 (36.6)**	**1086**	**415 (36.9)**	**1125**	**0.98 (0.88, 1.09)**	**0.654**	
Revised	SUPPORT		.		.		.	
software	COT	86 (38.7)	222	77 (34.7)	222	1.05 (0.84, 1.32)	0.669	
	BOOST NZ		.		.		.	
	BOOST II UK	50 (26.9)	186	46 (23.7)	194	1.15 (0.83, 1.61)	0.402	
	BOOST II AUS	47 (30.7)	153	41 (25.9)	158	1.25 (0.89, 1.77)	0.196	
	NeOProM	**183 (32.6)**	**561**	**164 (28.6)**	**574**	**1.11 (0.94, 1.32)**	**0.201**	
SGA:	SUPPORT	194 (43.5)	446	202 (43.8)	461	0.98 (0.84, 1.14)	0.775	0.843
Trialist	COT	158 (36.6)	432	161 (36.9)	436	0.96 (0.82, 1.13)	0.640	
defined -	BOOST II NZ	26 (27.4)	95	30 (30.6)	98	0.85 (0.56, 1.28)	0.434	
No	BOOST II UK	63 (30.3)	208	46 (21.9)	210	1.39 (1.01, 1.93)	0.046	
	BOOST II AUS	91 (26.5)	344	87 (24.3)	358	1.09 (0.85, 1.39)	0.498	
	NeOProM	**532 (34.9)**	**1525**	**526 (33.7)**	**1563**	**1.01 (0.92, 1.11)**	**0.791**	
Yes	SUPPORT	9 (56.3)	16	23 (62.2)	37	0.92 (0.55, 1.52)	0.735	
	COT	18 (46.2)	39	15 (44.1)	34	1.04 (0.63, 1.73)	0.879	
	BOOST II NZ	7 (46.7)	15	2 (25.0)	8	1.75 (0.47, 6.57)	0.408	
	BOOST II UK	8 (25.8)	31	13 (35.1)	37	0.73 (0.35, 1.54)	0.414	
	BOOST II AUS	19 (38.8)	49	16 (28.6)	56	1.36 (0.79, 2.34)	0.271	
	NeOProM	**61 (40.7)**	**150**	**69 (40.1)**	**172**	**1.04 (0.80, 1.35)**	**0.792**	
SGA:	SUPPORT	169 (42.0)	402	182 (43.3)	420	0.96 (0.81, 1.13)	0.584	0.580
NeOProM	COT	158 (36.6)	432	161 (36.9)	436	0.96 (0.82, 1.13)	0.640	
defined -	BOOST II NZ	26 (27.4)	95	30 (30.6)	98	0.85 (0.56, 1.28)	0.434	
No	BOOST II UK	66 (30.3)	218	50 (22.5)	222	1.35 (0.99, 1.85)	0.060	
	BOOST II AUS	91 (26.5)	344	87 (24.3)	358	1.09 (0.85, 1.39)	0.498	
	NeOProM	**510 (34.2)**	**1491**	**510 (33.2)**	**1534**	**1.00 (0.91, 1.11)**	**0.935**	
Yes	SUPPORT	34 (56.7)	60	43 (55.1)	78	1.02 (0.75, 1.39)	0.888	
	COT	18 (46.2)	39	15 (44.1)	34	1.04 (0.63, 1.73)	0.879	
	BOOST II NZ	7 (46.7)	15	2 (25.0)	8	1.75 (0.47, 6.57)	0.408	
	BOOST II UK	5 (22.7)	22	9 (36.0)	25	0.63 (0.25, 1.60)	0.333	
	BOOST II AUS	19 (38.8)	49	16 (28.6)	56	1.36 (0.79, 2.34)	0.271	
	NeOProM	**83 (44.9)**	**185**	**85 (42.3)**	**201**	**0.39 (0.16, 0.93)**	**0.033**	

* Analysis adjusted for trials and multiple births

Abbreviations/definitions

CI: confidence interval; RR: relative risk; GA: gestational age; SUPPORT: Surfactant Positive Airway Pressure and Pulse Oximetry Trial; COT: Canadian Oxygen Trial; BOOST: Benefits of Oxygen Saturation Targeting; NZ: New Zealand; UK: United Kingdom; AUS: Australia; NeOProM: Neonatal Oxygenation Prospective Meta-analysis; inborn: born inside the treating center; outborn: born outside the treating center (e.g. transferred from another hospital; vaginal: mode of delivery through the vagina; Caesarean: mode of delivery via surgical procedure; ANS: antenatal corticosteroids; singleton: child born as a single birth; multiple: more than one child per birth; start<6 hrs: intervention commenced less than 6 hours after birth; start>=6 hrs: intervention commenced greater than or equal to 6 hours after birth; original software: original oximeter software; revised software: revised oximeter software; SGA: small for gestational age; SGA NeOProM defined: small for gestational age as per definition used by NeOProM collaboration, i.e. less than 10th percentile using charts from Kramer et al.[1]

The subgroup analysis by oximeter software type (original vs revised) excludes n=74 infants in COT who were exposed to both the original and revised software.

Empty cells (.) indicate data not collected or not applicable in this trial.

These analyses exclude infants in SUPPORT and COT where values of Bayley-III were imputed for infants who had unsuccessful Bayley-III assessments due to severe developmental delay or autism.

*** Low / no event rate(s) makes parameter not estimable.

eTable 21. Bayley-III language or cognitive <70, by subgroups

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
GA<26 wks	SUPPORT	33 (19.5)	169	54 (27.4)	197	0.68 (0.45, 1.01)	0.054	0.191
	COT	29 (16.4)	177	33 (18.9)	175	0.86 (0.55, 1.34)	0.502	
	BOOST NZ	1 (2.5)	40	2 (4.5)	44	0.55 (0.05, 5.59)	0.615	
	BOOST II UK	15 (17.4)	86	15 (16.7)	90	1.18 (0.55, 2.55)	0.669	
	BOOST II AUS	19 (12.6)	151	20 (11.7)	171	1.03 (0.59, 1.80)	0.923	
	NeOProM	**97 (15.6)**	**623**	**124 (18.3)**	**677**	**0.83 (0.65, 1.06)**	**0.141**	
GA>=26 wks	SUPPORT	39 (12.9)	303	41 (13.3)	308	0.94 (0.62, 1.45)	0.790	
	COT	31 (11.2)	276	32 (11.2)	286	0.91 (0.56, 1.47)	0.693	
	BOOST NZ	6 (7.9)	76	2 (2.9)	70	2.80 (0.61, 12.8)	0.184	
	BOOST II UK	19 (11.9)	159	14 (8.3)	169	1.45 (0.73, 2.88)	0.285	
	BOOST II AUS	19 (7.5)	255	19 (7.5)	255	1.07 (0.58, 1.98)	0.818	
	NeOProM	**114 (10.7)**	**1069**	**108 (9.9)**	**1088**	**1.06 (0.81, 1.37)**	**0.687**	
Inborn	SUPPORT	72 (15.3)	472	95 (18.8)	505	0.79 (0.59, 1.05)	0.104	0.966
	COT	54 (12.8)	421	58 (13.8)	421	0.89 (0.63, 1.25)	0.492	
	BOOST NZ	7 (6.4)	110	4 (3.7)	109	1.75 (0.53, 5.81)	0.358	
	BOOST II UK	31 (14.2)	219	25 (10.8)	231	1.37 (0.80, 2.36)	0.257	
	BOOST II AUS	36 (9.5)	377	38 (9.4)	405	1.02 (0.67, 1.55)	0.938	
	NeOProM	**200 (12.5)**	**1599**	**220 (13.2)**	**1671**	**0.93 (0.78, 1.12)**	**0.460**	
Outborn	SUPPORT		.		.		.	
	COT	6 (18.8)	32	7 (17.5)	40	1.07 (0.48, 2.37)	0.868	
	BOOST NZ	0	6	0	5		***	
	BOOST II UK	3 (11.5)	26	4 (14.3)	28	0.82 (0.21, 3.26)	0.781	
	BOOST II AUS	2 (6.9)	29	1 (4.8)	21	1.43 (0.15, 13.2)	0.754	
	NeOProM	**11 (11.8)**	**93**	**12 (12.8)**	**94**	**1.02 (0.48, 2.18)**	**0.964**	
Vaginal	SUPPORT	19 (13.0)	146	32 (18.4)	174	0.62 (0.36, 1.07)	0.083	0.870
	COT	24 (14.4)	167	29 (15.2)	191	0.95 (0.58, 1.55)	0.824	
	BOOST NZ	2 (4.3)	47	1 (2.0)	51	2.16 (0.21, 22.4)	0.519	
	BOOST II UK	18 (12.4)	145	16 (10.9)	147	1.14 (0.59, 2.19)	0.697	
	BOOST II AUS	18 (9.4)	191	17 (8.9)	191	1.06 (0.56, 2.01)	0.851	
	NeOProM	**81 (11.6)**	**696**	**95 (12.6)**	**754**	**0.92 (0.69, 1.21)**	**0.538**	
Caesarean	SUPPORT	53 (16.3)	326	63 (19.0)	331	0.84 (0.60, 1.19)	0.335	
	COT	36 (12.6)	286	36 (13.4)	269	0.88 (0.57, 1.37)	0.569	
	BOOST NZ	5 (7.2)	69	3 (4.8)	63	1.54 (0.39, 6.02)	0.537	
	BOOST II UK	16 (16.0)	100	13 (11.6)	112	1.44 (0.70, 2.95)	0.319	
	BOOST II AUS	19 (8.9)	214	21 (9.0)	233	1.04 (0.61, 1.79)	0.884	
	NeOProM	**129 (13.0)**	**995**	**136 (13.5)**	**1008**	**0.95 (0.75, 1.19)**	**0.647**	
ANS - No	SUPPORT	3 (17.6)	17	5 (20.8)	24	0.93 (0.24, 3.59)	0.912	0.175
	COT	10 (21.7)	46	15 (36.6)	41	0.58 (0.29, 1.17)	0.130	
	BOOST NZ	0	13	0	10		***	
	BOOST II UK	1 (6.3)	16	2 (11.1)	18	0.57 (0.06, 5.57)	0.628	

eTable 21. Bayley-III language or cognitive <70, by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	BOOST II AUS	3 (7.3)	41	4 (14.8)	27	0.43 (0.11, 1.72)	0.232	
	NeOProM	**17 (12.8)**	**133**	**26 (21.7)**	**120**	**0.61 (0.36, 1.05)**	**0.081**	
ANS - Yes	SUPPORT	69 (15.2)	455	90 (18.7)	481	0.79 (0.59, 1.06)	0.122	
	COT	50 (12.3)	406	50 (11.9)	420	0.97 (0.67, 1.39)	0.859	
	BOOST NZ	7 (6.8)	103	4 (3.8)	104	1.79 (0.54, 5.90)	0.341	
	BOOST II UK	33 (14.5)	228	26 (10.9)	239	1.37 (0.81, 2.31)	0.236	
	BOOST II AUS	35 (9.6)	363	35 (8.9)	395	1.06 (0.69, 1.63)	0.783	
	NeOProM	**194 (12.5)**	**1555**	**205 (12.5)**	**1639**	**0.98 (0.81, 1.18)**	**0.793**	
Male	SUPPORT	43 (18.2)	236	63 (22.7)	278	0.79 (0.55, 1.13)	0.197	0.912
	COT	43 (17.1)	251	45 (19.0)	237	0.86 (0.58, 1.28)	0.461	
	BOOST NZ	3 (5.2)	58	4 (6.8)	59	0.75 (0.18, 3.13)	0.690	
	BOOST II UK	20 (16.3)	123	17 (13.0)	131	1.26 (0.68, 2.33)	0.467	
	BOOST II AUS	29 (14.4)	201	22 (10.4)	212	1.31 (0.76, 2.26)	0.332	
	NeOProM	**138 (15.9)**	**869**	**151 (16.5)**	**917**	**0.95 (0.76, 1.18)**	**0.622**	
Female	SUPPORT	29 (12.3)	236	32 (14.1)	227	0.83 (0.51, 1.35)	0.448	
	COT	17 (8.4)	202	20 (8.9)	224	0.95 (0.53, 1.71)	0.863	
	BOOST NZ	4 (6.9)	58	0	55		***	
	BOOST II UK	14 (11.5)	122	12 (9.4)	128	1.29 (0.53, 3.14)	0.574	
	BOOST II AUS	9 (4.4)	205	17 (7.9)	214	0.55 (0.25, 1.21)	0.138	
	NeOProM	**73 (8.9)**	**823**	**81 (9.6)**	**848**	**0.91 (0.67, 1.24)**	**0.548**	
Singleton	SUPPORT	51 (14.5)	351	75 (19.8)	379	0.73 (0.53, 1.02)	0.062	0.776
	COT	42 (13.6)	309	39 (12.1)	322	1.12 (0.75, 1.69)	0.579	
	BOOST NZ	5 (5.9)	85	3 (3.4)	87	1.71 (0.42, 6.92)	0.455	
	BOOST II UK	16 (9.8)	164	17 (9.3)	183	1.05 (0.55, 2.01)	0.882	
	BOOST II AUS	30 (9.8)	305	27 (8.3)	326	1.19 (0.72, 1.95)	0.497	
	NeOProM	**144 (11.9)**	**1214**	**161 (12.4)**	**1297**	**0.95 (0.77, 1.17)**	**0.619**	
Multiple	SUPPORT	21 (17.4)	121	20 (15.9)	126	1.07 (0.55, 2.06)	0.846	
	COT	18 (12.5)	144	26 (18.7)	139	0.62 (0.37, 1.04)	0.071	
	BOOST NZ	2 (6.5)	31	1 (3.7)	27	1.81 (0.17, 19.0)	0.619	
	BOOST II UK	18 (22.2)	81	12 (15.8)	76	1.44 (0.72, 2.87)	0.305	
	BOOST II AUS	8 (7.9)	101	12 (12.0)	100	0.71 (0.34, 1.48)	0.360	
	NeOProM	**67 (14.0)**	**478**	**71 (15.2)**	**468**	**0.90 (0.66, 1.23)**	**0.501**	
start<6 hrs	SUPPORT	70 (15.2)	461	93 (18.8)	495	0.78 (0.58, 1.05)	0.100	0.356
	COT	3 (14.3)	21	4 (20.0)	20	0.73 (0.19, 2.77)	0.641	
	BOOST NZ	5 (22.7)	22	1 (4.8)	21	5.10 (0.70, 36.9)	0.107	
	BOOST II UK		.		.		.	
	BOOST II AUS	3 (7.7)	39	7 (14.3)	49	0.56 (0.16, 1.99)	0.368	
	NeOProM	**81 (14.9)**	**543**	**105 (17.9)**	**585**	**0.80 (0.60, 1.06)**	**0.116**	
>=6 hrs	SUPPORT	1 (20.0)	5	0	4		***	
	COT	57 (13.2)	432	61 (13.8)	441	0.91 (0.65, 1.27)	0.568	
	BOOST NZ	2 (2.1)	94	3 (3.2)	93	0.66 (0.11, 3.89)	0.648	

eTable 21. Bayley-III language or cognitive <70, by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	BOOST II UK		.		.		.	
	BOOST II AUS	35 (9.6)	366	32 (8.5)	377	1.16 (0.76, 1.79)	0.493	
	NeOProM	**95 (10.6)**	**897**	**96 (10.5)**	**915**	**0.98 (0.75, 1.27)**	**0.858**	
Original	SUPPORT	72 (15.3)	472	95 (18.8)	505	0.79 (0.59, 1.05)	0.104	0.622
software	COT	29 (13.7)	212	30 (14.2)	211	0.97 (0.63, 1.52)	0.908	
	BOOST NZ	7 (6.0)	116	4 (3.5)	114	1.74 (0.52, 5.76)	0.365	
	BOOST II UK	8 (14.8)	54	8 (13.8)	58	3.37 (0.62, 18.4)	0.161	
	BOOST II AUS	24 (9.5)	252	21 (8.0)	263	1.17 (0.67, 2.03)	0.578	
	NeOProM	**140 (12.7)**	**1106**	**158 (13.7)**	**1151**	**0.92 (0.75, 1.14)**	**0.461**	
Revised	SUPPORT		.		.		.	
software	COT	29 (13.6)	214	28 (13.1)	213	0.90 (0.54, 1.49)	0.679	
	BOOST NZ		.		.		.	
	BOOST II UK	26 (13.6)	191	21 (10.4)	201	1.30 (0.76, 2.21)	0.335	
	BOOST II AUS	14 (9.1)	154	18 (11.0)	163	0.84 (0.45, 1.57)	0.585	
	NeOProM	**69 (12.3)**	**559**	**67 (11.6)**	**577**	**1.04 (0.75, 1.43)**	**0.814**	
SGA:	SUPPORT	66 (14.5)	456	78 (16.7)	467	0.83 (0.61, 1.14)	0.248	0.033
Trialist	COT	57 (13.8)	414	59 (13.8)	428	0.96 (0.69, 1.34)	0.813	
defined -	BOOST II NZ	3 (3.0)	101	2 (1.9)	106	1.58 (0.27, 9.12)	0.612	
No	BOOST II UK	32 (15.2)	211	23 (10.4)	222	1.48 (0.87, 2.54)	0.151	
	BOOST II AUS	34 (9.6)	356	30 (8.2)	368	1.13 (0.71, 1.78)	0.615	
	NeOProM	**192 (12.5)**	**1538**	**192 (12.1)**	**1591**	**1.00 (0.82, 1.21)**	**0.976**	
Yes	SUPPORT	6 (37.5)	16	17 (44.7)	38	0.82 (0.40, 1.69)	0.587	
	COT	3 (7.7)	39	6 (18.2)	33	0.69 (0.43, 1.11)	0.129	
	BOOST II NZ	4 (26.7)	15	2 (25.0)	8	1.00 (0.23, 4.35)	0.999	
	BOOST II UK	2 (6.1)	33	6 (16.2)	37	0.38 (0.08, 1.74)	0.210	
	BOOST II AUS	4 (8.0)	50	9 (15.5)	58	0.52 (0.17, 1.57)	0.244	
	NeOProM	**19 (12.4)**	**153**	**40 (23.0)**	**174**	**0.64 (0.39, 1.05)**	**0.080**	
SGA:	SUPPORT	53 (12.9)	412	71 (16.7)	426	0.77 (0.54, 1.08)	0.125	0.314
NeOProM	COT	57 (13.8)	414	59 (13.8)	428	0.96 (0.69, 1.34)	0.813	
defined -	BOOST II NZ	3 (3.0)	101	2 (1.9)	106	1.58 (0.27, 9.12)	0.612	
No	BOOST II UK	32 (14.5)	221	25 (10.7)	234	1.36 (0.80, 2.31)	0.260	
	BOOST II AUS	34 (9.6)	356	30 (8.2)	368	1.13 (0.71, 1.78)	0.615	
	NeOProM	**179 (11.9)**	**1504**	**187 (12.0)**	**1562**	**0.97 (0.80, 1.18)**	**0.755**	
Yes	SUPPORT	19 (31.7)	60	24 (30.4)	79	0.95 (0.56, 1.60)	0.840	
	COT	3 (7.7)	39	6 (18.2)	33	0.69 (0.43, 1.11)	0.129	
	BOOST II NZ	4 (26.7)	15	2 (25.0)	8	1.00 (0.23, 4.35)	0.999	
	BOOST II UK	2 (8.3)	24	4 (16.0)	25	0.52 (0.11, 2.61)	0.431	
	BOOST II AUS	4 (8.0)	50	9 (15.5)	58	0.52 (0.17, 1.57)	0.244	
	NeOProM	**32 (17.0)**	**188**	**45 (22.2)**	**203**	**0.80 (0.53, 1.18)**	**0.260**	

* Analysis adjusted for trials and multiple births

Abbreviations/definitions

CI: confidence interval; RR: relative risk; GA: gestational age; SUPPORT: Surfactant Positive Airway Pressure and Pulse Oximetry Trial; COT: Canadian Oxygen Trial; BOOST: Benefits of Oxygen Saturation Targeting; NZ: New Zealand; UK: United Kingdom; AUS: Australia; NeOProM: Neonatal Oxygenation Prospective Meta-analysis; inborn: born inside the treating center; outborn: born outside the treating center (e.g. transferred from another hospital; vaginal: mode of delivery through the vagina; Caesarean: mode of delivery via surgical procedure; ANS: antenatal corticosteroids; singleton: child born as a single birth; multiple: more than one child per birth; start<6 hrs: intervention commenced less than 6 hours after birth; start>=6 hrs: intervention commenced greater than or equal to 6 hours after birth; original software: original oximeter software; revised software: revised oximeter software; SGA: small for gestational age; SGA NeOProM defined: small for gestational age as per definition used by NeOProM collaboration, i.e. less than 10th percentile using charts from Kramer et al.[1]

The subgroup analysis by oximeter software type (original vs revised) excludes n=74 infants in COT who were exposed to both the original and revised software.

Empty cells (.) indicate data not collected or not applicable in this trial.

These analyses exclude infants in SUPPORT and COT where values of Bayley-III were imputed for infants who had unsuccessful Bayley-III assessments due to severe developmental delay or autism.

*** Low / no event rate(s) makes parameter not estimable.

eTable 22. Bayley-III cognitive <70, by subgroups

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
GA<26 wks	SUPPORT	17 (10.1)	169	22 (11.2)	196	0.88 (0.48, 1.63)	0.691	0.609
	COT	15 (8.4)	178	22 (12.6)	175	0.66 (0.36, 1.21)	0.180	
	BOOST NZ	1 (2.5)	40	1 (2.3)	44	1.10 (0.07, 16.4)	0.946	
	BOOST II UK	13 (15.1)	86	8 (8.9)	90	2.08 (0.69, 6.29)	0.195	
	BOOST II AUS	9 (6.0)	151	9 (5.3)	171	1.13 (0.46, 2.79)	0.787	
	NeOProM	**55 (8.8)**	**624**	**62 (9.2)**	**676**	**0.95 (0.67, 1.35)**	**0.789**	
GA>=26 wks	SUPPORT	17 (5.6)	302	16 (5.2)	307	1.02 (0.51, 2.04)	0.954	
	COT	9 (3.2)	279	15 (5.2)	286	0.08 (0.01, 0.41)	0.003	
	BOOST NZ	4 (5.3)	76	0	70		***	
	BOOST II UK	10 (6.3)	159	6 (3.6)	169	1.75 (0.60, 5.12)	0.303	
	BOOST II AUS	8 (3.1)	255	5 (2.0)	255	1.60 (0.54, 4.80)	0.399	
	NeOProM	**48 (4.5)**	**1071**	**42 (3.9)**	**1087**	**1.10 (0.70, 1.71)**	**0.681**	
Inborn	SUPPORT	34 (7.2)	471	38 (7.6)	503	0.93 (0.59, 1.47)	0.756	0.525
	COT	21 (5.0)	424	34 (8.1)	421	0.52 (0.30, 0.91)	0.022	
	BOOST NZ	5 (4.5)	110	1 (0.9)	109	4.97 (0.59, 42.0)	0.141	
	BOOST II UK	20 (9.1)	219	12 (5.2)	231	1.90 (0.85, 4.25)	0.117	
	BOOST II AUS	16 (4.2)	377	14 (3.5)	405	1.23 (0.61, 2.49)	0.567	
	NeOProM	**96 (6.0)**	**1601**	**99 (5.9)**	**1669**	**0.99 (0.75, 1.32)**	**0.952**	
Outborn	SUPPORT		.		.		.	
	COT	3 (9.1)	33	3 (7.5)	40	1.21 (0.28, 5.23)	0.798	
	BOOST NZ	0	6	0	5		***	
	BOOST II UK	3 (11.5)	26	2 (7.1)	28	1.71 (0.30, 9.66)	0.545	
	BOOST II AUS	1 (3.4)	29	0	21		***	
	NeOProM	**7 (7.4)**	**94**	**5 (5.3)**	**94**	**1.54 (0.50, 4.28)**	**0.481**	
Vaginal	SUPPORT	9 (6.2)	145	14 (8.1)	173	0.67 (0.29, 1.56)	0.355	0.873
	COT	9 (5.4)	167	16 (8.4)	191	0.64 (0.29, 1.41)	0.268	
	BOOST NZ	2 (4.3)	47	1 (2.0)	51	2.16 (0.21, 22.4)	0.519	
	BOOST II UK	12 (8.3)	145	7 (4.8)	147	1.78 (0.72, 4.41)	0.211	
	BOOST II AUS	7 (3.7)	191	4 (2.1)	191	1.80 (0.54, 5.99)	0.338	
	NeOProM	**39 (5.6)**	**695**	**42 (5.6)**	**753**	**1.00 (0.65, 1.52)**	**0.986**	
Caesarean	SUPPORT	25 (7.7)	326	24 (7.3)	330	1.05 (0.60, 1.84)	0.856	
	COT	15 (5.2)	290	21 (7.8)	269	0.56 (0.28, 1.12)	0.101	
	BOOST NZ	3 (4.3)	69	0	63		***	
	BOOST II UK	11 (11.0)	100	7 (6.3)	112	2.03 (0.73, 5.70)	0.177	
	BOOST II AUS	9 (4.2)	214	10 (4.3)	233	0.97 (0.40, 2.36)	0.953	
	NeOProM	**63 (6.3)**	**999**	**62 (6.2)**	**1007**	**1.03 (0.72, 1.47)**	**0.858**	
ANS - No	SUPPORT	2 (11.8)	17	0	24		***	0.593
	COT	5 (10.9)	46	8 (19.5)	41	0.55 (0.21, 1.47)	0.233	
	BOOST NZ	0	13	0	10		***	

eTable 22. Bayley-III cognitive <70, by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	BOOST II UK	1 (6.3)	16	1 (5.6)	18	1.13 (0.08, 16.3)	0.927	
	BOOST II AUS	2 (4.9)	41	2 (7.4)	27	0.53 (0.10, 2.79)	0.454	
	NeOProM	**10 (7.5)**	**133**	**11 (9.2)**	**120**	**0.79 (0.39, 1.81)**	**0.661**	
ANS - Yes	SUPPORT	32 (7.0)	454	38 (7.9)	479	0.88 (0.55, 1.41)	0.600	
	COT	19 (4.6)	410	29 (6.9)	420	0.52 (0.29, 0.93)	0.028	
	BOOST NZ	5 (4.9)	103	1 (1.0)	104	5.06 (0.60, 42.8)	0.136	
	BOOST II UK	22 (9.6)	228	13 (5.4)	239	1.85 (0.88, 3.89)	0.103	
	BOOST II AUS	15 (4.1)	363	12 (3.0)	395	1.36 (0.65, 2.88)	0.415	
	NeOProM	**93 (6.0)**	**1558**	**93 (5.7)**	**1637**	**1.03 (0.77, 1.37)**	**0.849**	
Male	SUPPORT	18 (7.6)	236	25 (9.0)	278	0.84 (0.47, 1.52)	0.568	0.456
	COT	16 (6.3)	252	27 (11.4)	237	0.44 (0.21, 0.90)	0.025	
	BOOST NZ	3 (5.2)	58	1 (1.7)	59	3.04 (0.32, 28.6)	0.330	
	BOOST II UK	13 (10.6)	123	9 (6.9)	131	1.63 (0.70, 3.81)	0.261	
	BOOST II AUS	14 (7.0)	201	8 (3.8)	212	1.85 (0.79, 4.33)	0.154	
	NeOProM	**64 (7.4)**	**870**	**70 (7.6)**	**917**	**0.94 (0.67, 1.32)**	**0.729**	
Female	SUPPORT	16 (6.8)	235	13 (5.8)	225	1.11 (0.52, 2.35)	0.786	
	COT	8 (3.9)	205	10 (4.5)	224	0.87 (0.35, 2.17)	0.769	
	BOOST NZ	2 (3.4)	58	0	55		***	
	BOOST II UK	10 (8.2)	122	5 (3.9)	128	2.11 (0.75, 5.95)	0.158	
	BOOST II AUS	3 (1.5)	205	6 (2.8)	214	0.52 (0.13, 2.06)	0.354	
	NeOProM	**39 (4.7)**	**825**	**34 (4.0)**	**846**	**1.13 (0.71, 1.79)**	**0.615**	
Singleton	SUPPORT	25 (7.1)	350	31 (8.2)	377	0.87 (0.52, 1.44)	0.586	0.432
	COT	14 (4.5)	311	23 (7.1)	322	0.63 (0.33, 1.20)	0.161	
	BOOST NZ	4 (4.7)	85	1 (1.1)	87	4.09 (0.47, 35.9)	0.203	
	BOOST II UK	10 (6.1)	164	7 (3.8)	183	1.59 (0.62, 4.09)	0.332	
	BOOST II AUS	12 (3.9)	305	11 (3.4)	326	1.17 (0.52, 2.60)	0.708	
	NeOProM	**65 (5.3)**	**1215**	**73 (5.6)**	**1295**	**0.95 (0.68, 1.31)**	**0.741**	
Multiple	SUPPORT	9 (7.4)	121	7 (5.6)	126	1.34 (0.44, 4.11)	0.604	
	COT	10 (6.8)	146	14 (10.1)	139	0.56 (0.26, 1.17)	0.120	
	BOOST NZ	1 (3.2)	31	0	27		***	
	BOOST II UK	13 (16.0)	81	7 (9.2)	76	1.76 (0.71, 4.39)	0.224	
	BOOST II AUS	5 (5.0)	101	3 (3.0)	100	1.66 (0.40, 6.87)	0.483	
	NeOProM	**38 (7.9)**	**480**	**31 (6.6)**	**468**	**1.13 (0.71, 1.81)**	**0.608**	
start<6 hrs	SUPPORT	33 (7.2)	460	37 (7.5)	493	0.93 (0.58, 1.48)	0.751	0.672
	COT	1 (4.8)	21	2 (10.0)	20	0.48 (0.05, 4.81)	0.532	
	BOOST NZ	4 (18.2)	22	0	21		***	
	BOOST II UK		.		.		.	
	BOOST II AUS	2 (5.1)	39	5 (10.2)	49	0.54 (0.12, 2.43)	0.425	
	NeOProM	**40 (7.4)**	**542**	**44 (7.5)**	**583**	**0.94 (0.61, 1.47)**	**0.791**	
>=6 hrs	SUPPORT	0	5	0	4		***	

eTable 22. Bayley-III cognitive <70, by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	COT	23 (5.3)	436	35 (7.9)	441	0.57 (0.34, 0.97)	0.040	
	BOOST NZ	1 (1.1)	94	1 (1.1)	93	0.99 (0.06, 15.5)	0.994	
	BOOST II UK		.		.		.	
	BOOST II AUS	15 (4.1)	366	9 (2.4)	377	1.71 (0.76, 3.87)	0.195	
	NeOProM	**39 (4.3)**	**901**	**45 (4.9)**	**915**	**0.87 (0.58, 1.34)**	**0.554**	
Original	SUPPORT	34 (7.2)	471	38 (7.6)	503	0.93 (0.59, 1.47)	0.756	0.567
software	COT	9 (4.2)	213	15 (7.1)	211	0.61 (0.28, 1.33)	0.215	
	BOOST NZ	5 (4.3)	116	1 (0.9)	114	4.92 (0.58, 41.7)	0.143	
	BOOST II UK	6 (11.1)	54	4 (6.9)	58	14.7 (0.35, 625)	0.160	
	BOOST II AUS	9 (3.6)	252	8 (3.0)	263	1.19 (0.47, 3.00)	0.715	
	NeOProM	**63 (5.7)**	**1106**	**66 (5.7)**	**1149**	**1.00 (0.70, 1.42)**	**0.995**	
Revised	SUPPORT		.		.		.	
software	COT	15 (6.9)	217	17 (8.0)	213	0.63 (0.30, 1.29)	0.205	
	BOOST NZ		.		.		.	
	BOOST II UK	17 (8.9)	191	10 (5.0)	201	1.81 (0.85, 3.84)	0.123	
	BOOST II AUS	8 (5.2)	154	6 (3.7)	163	1.42 (0.50, 3.98)	0.510	
	NeOProM	**40 (7.1)**	**562**	**33 (5.7)**	**577**	**1.22 (0.77, 1.92)**	**0.401**	
SGA:	SUPPORT	29 (6.4)	455	31 (6.7)	465	0.92 (0.55, 1.54)	0.757	0.237
Trialist	COT	24 (5.7)	418	34 (7.9)	428	0.63 (0.37, 1.06)	0.079	
defined -	BOOST II NZ	3 (3.0)	101	1 (0.9)	106	3.14 (0.34, 29.3)	0.314	
No	BOOST II UK	21 (10.0)	211	11 (5.0)	222	2.03 (0.92, 4.44)	0.078	
	BOOST II AUS	15 (4.2)	356	8 (2.2)	368	1.95 (0.84, 4.51)	0.121	
	NeOProM	**92 (6.0)**	**1541**	**85 (5.3)**	**1589**	**1.07 (0.79, 1.44)**	**0.655**	
Yes	SUPPORT	5 (31.3)	16	7 (18.4)	38	1.68 (0.63, 4.52)	0.304	
	COT	0	39	3 (9.1)	33		***	
	BOOST II NZ	2 (13.3)	15	0	8		***	
	BOOST II UK	2 (6.1)	33	3 (8.1)	37	0.75 (0.13, 4.22)	0.744	
	BOOST II AUS	2 (4.0)	50	6 (10.3)	58	0.39 (0.08, 1.83)	0.231	
	NeOProM	**11 (7.2)**	**153**	**19 (10.9)**	**174**	**0.84 (0.40, 1.74)**	**0.640**	
SGA:	SUPPORT	24 (5.8)	411	28 (6.6)	424	0.85 (0.49, 1.48)	0.572	0.574
NeOProM	COT	24 (5.7)	418	34 (7.9)	428	0.63 (0.37, 1.06)	0.079	
defined -	BOOST II NZ	3 (3.0)	101	1 (0.9)	106	3.14 (0.34, 29.3)	0.314	
No	BOOST II UK	21 (9.5)	221	12 (5.1)	234	1.85 (0.87, 3.90)	0.108	
	BOOST II AUS	15 (4.2)	356	8 (2.2)	368	1.95 (0.84, 4.51)	0.121	
	NeOProM	**87 (5.8)**	**1507**	**83 (5.3)**	**1560**	**1.04 (0.76, 1.41)**	**0.813**	
Yes	SUPPORT	10 (16.7)	60	10 (12.7)	79	1.31 (0.58, 2.96)	0.509	
	COT	0	39	3 (9.1)	33		***	
	BOOST II NZ	2 (13.3)	15	0	8		***	
	BOOST II UK	2 (8.3)	24	2 (8.0)	25	1.05 (0.16, 6.88)	0.960	
	BOOST II AUS	2 (4.0)	50	6 (10.3)	58	0.39 (0.08, 1.83)	0.231	
	NeOProM	**16 (8.5)**	**188**	**21 (10.3)**	**203**	**0.89 (0.48, 1.65)**	**0.718**	

* Analysis adjusted for trials and multiple births

Abbreviations/definitions

CI: confidence interval; RR: relative risk; GA: gestational age; SUPPORT: Surfactant Positive Airway Pressure and Pulse Oximetry Trial; COT: Canadian Oxygen Trial; BOOST: Benefits of Oxygen Saturation Targeting; NZ: New Zealand; UK: United Kingdom; AUS: Australia; NeOProM: Neonatal Oxygenation Prospective Meta-analysis; inborn: born inside the treating center; outborn: born outside the treating center (e.g. transferred from another hospital; vaginal: mode of delivery through the vagina; Caesarean: mode of delivery via surgical procedure; ANS: antenatal corticosteroids; singleton: child born as a single birth; multiple: more than one child per birth; start<6 hrs: intervention commenced less than 6 hours after birth; start>=6 hrs: intervention commenced greater than or equal to 6 hours after birth; original software: original oximeter software; revised software: revised oximeter software; SGA: small for gestational age; SGA NeOProM defined: small for gestational age as per definition used by NeOProM collaboration, i.e. less than 10th percentile using charts from Kramer et al.[1]

The subgroup analysis by oximeter software type (original vs revised) excludes n=74 infants in COT who were exposed to both the original and revised software.

Empty cells (.) indicate data not collected or not applicable in this trial.

These analyses exclude infants in SUPPORT and COT where values of Bayley-III were imputed for infants who had unsuccessful Bayley-III assessments due to severe developmental delay or autism.

*** Low / no event rate(s) makes parameter not estimable.

eTable 23. Bayley-III language <70, by subgroups

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
GA<26 wks	SUPPORT	33 (19.6)	168	48 (24.9)	193	0.75 (0.50, 1.13)	0.163	0.297
	COT	27 (15.3)	176	28 (16.5)	170	0.92 (0.58, 1.47)	0.729	
	BOOST NZ	1 (2.5)	40	1 (2.5)	40	1.00 (0.07, 14.8)	0.999	
	BOOST II UK	14 (16.7)	84	13 (14.9)	87	1.34 (0.54, 3.31)	0.523	
	BOOST II AUS	17 (11.6)	146	17 (10.2)	167	1.10 (0.61, 1.96)	0.755	
	NeOProM	**92 (15.0)**	**614**	**107 (16.3)**	**657**	**0.91 (0.70, 1.17)**	**0.452**	
GA>=26 wks	SUPPORT	36 (12.2)	294	37 (12.1)	305	1.00 (0.64, 1.56)	0.993	
	COT	30 (11.0)	273	29 (10.2)	284	1.02 (0.63, 1.66)	0.928	
	BOOST NZ	6 (8.6)	70	2 (3.0)	66	2.93 (0.68, 12.7)	0.151	
	BOOST II UK	18 (11.5)	156	13 (8.1)	160	1.42 (0.69, 2.92)	0.337	
	BOOST II AUS	18 (7.3)	247	18 (7.3)	247	1.08 (0.57, 2.05)	0.803	
	NeOProM	**108 (10.4)**	**1040**	**99 (9.3)**	**1062**	**1.11 (0.85, 1.44)**	**0.464**	
Inborn	SUPPORT	69 (14.9)	462	85 (17.1)	498	0.85 (0.63, 1.15)	0.299	0.848
	COT	51 (12.2)	417	50 (12.1)	414	0.98 (0.68, 1.41)	0.917	
	BOOST NZ	7 (6.7)	104	3 (3.0)	101	2.33 (0.63, 8.65)	0.207	
	BOOST II UK	29 (13.6)	214	23 (10.5)	220	1.36 (0.76, 2.44)	0.301	
	BOOST II AUS	34 (9.3)	364	34 (8.7)	393	1.09 (0.71, 1.69)	0.691	
	NeOProM	**190 (12.2)**	**1561**	**195 (12.0)**	**1626**	**1.00 (0.83, 1.22)**	**0.966**	
Outborn	SUPPORT		.		.		.	
	COT	6 (18.8)	32	7 (17.5)	40	1.07 (0.48, 2.37)	0.868	
	BOOST NZ	0	6	0	5		***	
	BOOST II UK	3 (11.5)	26	3 (11.1)	27	1.07 (0.24, 4.82)	0.927	
	BOOST II AUS	1 (3.4)	29	1 (4.8)	21	0.72 (0.05, 10.1)	0.810	
	NeOProM	**10 (10.8)**	**93**	**11 (11.8)**	**93**	**1.03 (0.46, 2.25)**	**0.951**	
Vaginal	SUPPORT	19 (13.2)	144	25 (14.7)	170	0.78 (0.44, 1.39)	0.396	0.678
	COT	23 (13.9)	165	24 (12.8)	187	1.08 (0.64, 1.84)	0.765	
	BOOST NZ	2 (4.4)	45	0	49		***	
	BOOST II UK	17 (11.9)	143	14 (10.1)	139	1.18 (0.58, 2.39)	0.643	
	BOOST II AUS	17 (9.4)	181	16 (8.7)	184	1.08 (0.56, 2.07)	0.819	
	NeOProM	**78 (11.5)**	**678**	**79 (10.8)**	**729**	**1.05 (0.78, 1.41)**	**0.757**	
Caesarean	SUPPORT	50 (15.7)	318	60 (18.3)	328	0.85 (0.60, 1.22)	0.385	
	COT	34 (12.0)	284	33 (12.4)	266	0.93 (0.59, 1.46)	0.760	
	BOOST NZ	5 (7.7)	65	3 (5.3)	57	1.51 (0.40, 5.70)	0.545	
	BOOST II UK	15 (15.5)	97	12 (11.1)	108	1.44 (0.68, 3.05)	0.337	
	BOOST II AUS	17 (8.1)	211	18 (7.9)	228	1.10 (0.61, 1.96)	0.756	
	NeOProM	**121 (12.4)**	**975**	**126 (12.8)**	**987**	**0.97 (0.76, 1.22)**	**0.777**	
ANS - No	SUPPORT	3 (17.6)	17	5 (20.8)	24	0.93 (0.24, 3.59)	0.912	0.234
	COT	9 (19.6)	46	13 (32.5)	40	0.59 (0.28, 1.25)	0.170	
	BOOST NZ	0	13	0	10		***	
	BOOST II UK	1 (6.3)	16	1 (6.3)	16	1.01 (0.07, 14.4)	0.996	

eTable 23. Bayley-III language <70, by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	BOOST II AUS	3 (7.7)	39	3 (11.1)	27	0.62 (0.14, 2.71)	0.521	
	NeOProM	**16 (12.2)**	**131**	**22 (18.8)**	**117**	**0.67 (0.38, 1.21)**	**0.193**	
ANS - Yes	SUPPORT	66 (14.8)	445	80 (16.9)	474	0.86 (0.63, 1.17)	0.346	
	COT	48 (11.9)	402	44 (10.6)	414	1.08 (0.74, 1.57)	0.692	
	BOOST NZ	7 (7.2)	97	3 (3.1)	96	2.38 (0.64, 8.76)	0.194	
	BOOST II UK	31 (13.9)	223	24 (10.5)	229	1.37 (0.78, 2.38)	0.271	
	BOOST II AUS	32 (9.1)	352	32 (8.4)	383	1.08 (0.69, 1.67)	0.743	
	NeOProM	**184 (12.1)**	**1519**	**183 (11.5)**	**1596**	**1.04 (0.86, 1.26)**	**0.683**	
Male	SUPPORT	41 (17.8)	230	57 (20.8)	274	0.85 (0.59, 1.23)	0.386	0.901
	COT	41 (16.6)	247	39 (16.8)	232	0.97 (0.65, 1.45)	0.879	
	BOOST NZ	3 (5.7)	53	3 (5.3)	57	1.07 (0.24, 4.75)	0.928	
	BOOST II UK	19 (15.7)	121	15 (12.2)	123	1.28 (0.67, 2.45)	0.448	
	BOOST II AUS	27 (13.8)	195	20 (9.7)	207	1.31 (0.72, 2.38)	0.382	
	NeOProM	**131 (15.5)**	**846**	**134 (15.0)**	**893**	**1.02 (0.81, 1.27)**	**0.888**	
Female	SUPPORT	28 (12.1)	232	28 (12.5)	224	0.91 (0.54, 1.52)	0.720	
	COT	16 (7.9)	202	18 (8.1)	222	0.98 (0.53, 1.82)	0.958	
	BOOST NZ	4 (7.0)	57	0	49		***	
	BOOST II UK	13 (10.9)	119	11 (8.9)	124	1.33 (0.48, 3.69)	0.586	
	BOOST II AUS	8 (4.0)	198	15 (7.2)	207	0.56 (0.24, 1.28)	0.167	
	NeOProM	**69 (8.5)**	**808**	**72 (8.7)**	**826**	**0.97 (0.71, 1.34)**	**0.865**	
Singleton	SUPPORT	50 (14.4)	347	66 (17.7)	373	0.81 (0.58, 1.14)	0.232	0.487
	COT	41 (13.4)	306	33 (10.5)	315	1.28 (0.83, 1.97)	0.263	
	BOOST NZ	5 (6.0)	83	2 (2.4)	82	2.47 (0.49, 12.4)	0.271	
	BOOST II UK	15 (9.1)	164	15 (8.5)	176	1.07 (0.54, 2.13)	0.839	
	BOOST II AUS	28 (9.6)	293	24 (7.6)	315	1.25 (0.74, 2.11)	0.395	
	NeOProM	**139 (11.7)**	**1193**	**140 (11.1)**	**1261**	**1.04 (0.84, 1.30)**	**0.699**	
Multiple	SUPPORT	19 (16.5)	115	19 (15.2)	125	1.04 (0.53, 2.04)	0.912	
	COT	16 (11.2)	143	24 (17.3)	139	0.63 (0.37, 1.07)	0.089	
	BOOST NZ	2 (7.4)	27	1 (4.2)	24	1.92 (0.18, 19.9)	0.586	
	BOOST II UK	17 (22.4)	76	11 (15.5)	71	1.46 (0.70, 3.02)	0.311	
	BOOST II AUS	7 (7.0)	100	11 (11.1)	99	0.73 (0.34, 1.54)	0.405	
	NeOProM	**61 (13.2)**	**461**	**66 (14.4)**	**458**	**0.91 (0.66, 1.25)**	**0.554**	
start<6 hrs	SUPPORT	67 (14.8)	452	83 (17.0)	488	0.85 (0.62, 1.15)	0.285	0.449
	COT	3 (14.3)	21	4 (20.0)	20	0.73 (0.19, 2.77)	0.641	
	BOOST NZ	5 (25.0)	20	1 (5.6)	18	4.14 (1.02, 16.9)	0.047	
	BOOST II UK		.		.		.	
	BOOST II AUS	3 (8.1)	37	5 (10.4)	48	0.79 (0.20, 3.11)	0.732	
	NeOProM	**78 (14.7)**	**530**	**93 (16.2)**	**574**	**0.88 (0.66, 1.18)**	**0.403**	
>=6 hrs	SUPPORT	1 (25.0)	4	0	4		***	
	COT	54 (12.6)	428	53 (12.2)	434	1.00 (0.71, 1.42)	0.998	
	BOOST NZ	2 (2.2)	90	2 (2.3)	88	1.00 (0.14, 6.86)	0.997	

eTable 23. Bayley-III language <70, by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	BOOST II UK		.		.		.	
	BOOST II AUS	32 (9.0)	355	30 (8.2)	366	1.14 (0.73, 1.79)	0.560	
	NeOProM	**89 (10.1)**	**877**	**85 (9.5)**	**892**	**1.04 (0.79, 1.37)**	**0.773**	
Original	SUPPORT	69 (14.9)	462	85 (17.1)	498	0.85 (0.63, 1.15)	0.299	0.713
software	COT	29 (13.8)	210	29 (13.9)	209	1.01 (0.64, 1.57)	0.977	
	BOOST NZ	7 (6.4)	110	3 (2.8)	106	2.31 (0.62, 8.57)	0.211	
	BOOST II UK	7 (13.0)	54	6 (11.3)	53	9.87 (0.46, 213)	0.144	
	BOOST II AUS	22 (9.2)	240	18 (7.0)	256	1.31 (0.74, 2.34)	0.354	
	NeOProM	**134 (12.5)**	**1076**	**141 (12.6)**	**1122**	**1.00 (0.80, 1.24)**	**0.969**	
Revised	SUPPORT		.		.		.	
software	COT	26 (12.3)	212	22 (10.5)	209	1.08 (0.63, 1.85)	0.788	
	BOOST NZ		.		.		.	
	BOOST II UK	25 (13.4)	186	20 (10.3)	194	1.30 (0.76, 2.24)	0.339	
	BOOST II AUS	13 (8.5)	153	17 (10.8)	158	0.81 (0.42, 1.55)	0.521	
	NeOProM	**64 (11.6)**	**551**	**59 (10.5)**	**561**	**1.09 (0.78, 1.53)**	**0.617**	
SGA:	SUPPORT	63 (14.1)	446	69 (15.0)	461	0.91 (0.66, 1.27)	0.585	0.025
Trialist	COT	54 (13.1)	411	52 (12.3)	422	1.04 (0.74, 1.47)	0.812	
defined -	BOOST II NZ	3 (3.2)	95	1 (1.0)	98	3.09 (0.33, 28.7)	0.322	
No	BOOST II UK	30 (14.4)	208	20 (9.5)	210	1.51 (0.83, 2.74)	0.178	
	BOOST II AUS	32 (9.3)	344	27 (7.5)	358	1.20 (0.75, 1.93)	0.446	
	NeOProM	**182 (12.1)**	**1504**	**169 (10.9)**	**1549**	**1.08 (0.89, 1.31)**	**0.448**	
Yes	SUPPORT	6 (37.5)	16	16 (43.2)	37	0.85 (0.41, 1.76)	0.656	
	COT	3 (7.9)	38	5 (15.6)	32	0.73 (0.45, 1.19)	0.207	
	BOOST II NZ	4 (26.7)	15	2 (25.0)	8	1.00 (0.23, 4.35)	0.999	
	BOOST II UK	2 (6.5)	31	6 (16.2)	37	0.40 (0.09, 1.83)	0.237	
	BOOST II AUS	3 (6.1)	49	8 (14.3)	56	0.43 (0.12, 1.53)	0.191	
	NeOProM	**18 (12.1)**	**149**	**37 (21.8)**	**170**	**0.66 (0.40, 1.11)**	**0.116**	
SGA:	SUPPORT	50 (12.4)	402	64 (15.2)	420	0.81 (0.57, 1.16)	0.256	0.382
NeOProM	COT	54 (13.1)	411	52 (12.3)	422	1.04 (0.74, 1.47)	0.812	
defined -	BOOST II NZ	3 (3.2)	95	1 (1.0)	98	3.09 (0.33, 28.7)	0.322	
No	BOOST II UK	30 (13.8)	218	22 (9.9)	222	1.37 (0.76, 2.47)	0.290	
	BOOST II AUS	32 (9.3)	344	27 (7.5)	358	1.20 (0.75, 1.93)	0.446	
	NeOProM	**169 (11.5)**	**1470**	**166 (10.9)**	**1520**	**1.04 (0.85, 1.27)**	**0.732**	
Yes	SUPPORT	19 (31.7)	60	21 (26.9)	78	1.07 (0.62, 1.84)	0.801	
	COT	3 (7.9)	38	5 (15.6)	32	0.73 (0.45, 1.19)	0.207	
	BOOST II NZ	4 (26.7)	15	2 (25.0)	8	1.00 (0.23, 4.35)	0.999	
	BOOST II UK	2 (9.1)	22	4 (16.0)	25	0.57 (0.11, 2.81)	0.488	
	BOOST II AUS	3 (6.1)	49	8 (14.3)	56	0.43 (0.12, 1.53)	0.191	
	NeOProM	**31 (16.8)**	**184**	**40 (20.1)**	**199**	**0.86 (0.57, 1.30)**	**0.700**	

* Analysis adjusted for trials and multiple births

Abbreviations/definitions

CI: confidence interval; RR: relative risk; GA: gestational age; SUPPORT: Surfactant Positive Airway Pressure and Pulse Oximetry Trial; COT: Canadian Oxygen Trial; BOOST: Benefits of Oxygen Saturation Targeting; NZ: New Zealand; UK: United Kingdom; AUS: Australia; NeOProM: Neonatal Oxygenation Prospective Meta-analysis; inborn: born inside the treating center; outborn: born outside the treating center (e.g. transferred from another hospital; vaginal: mode of delivery through the vagina; Caesarean: mode of delivery via surgical procedure; ANS: antenatal corticosteroids; singleton: child born as a single birth; multiple: more than one child per birth; start<6 hrs: intervention commenced less than 6 hours after birth; start>=6 hrs: intervention commenced greater than or equal to 6 hours after birth; original software: original oximeter software; revised software: revised oximeter software; SGA: small for gestational age; SGA NeOProM defined: small for gestational age as per definition used by NeOProM collaboration, i.e. less than 10th percentile using charts from Kramer et al.[1]

The subgroup analysis by oximeter software type (original vs revised) excludes n=74 infants in COT who were exposed to both the original and revised software.

Empty cells (.) indicate data not collected or not applicable in this trial.

These analyses exclude infants in SUPPORT and COT where values of Bayley-III were imputed for infants who had unsuccessful Bayley-III assessments due to severe developmental delay or autism.

*** Low / no event rate(s) makes parameter not estimable.

eTable 24. Patent ductus arteriosus (PDA) medically or surgically treated, by subgroups

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
GA<26 wks	SUPPORT	118 (44.4)	266	116 (42.0)	276	1.07 (0.87, 1.30)	0.526	0.462
	COT	173 (66.5)	260	176 (69.8)	252	0.94 (0.83, 1.06)	0.288	
	BOOST NZ	54 (75.0)	72	46 (63.9)	72	1.17 (0.94, 1.46)	0.153	
	BOOST II UK	102 (47.7)	214	111 (52.1)	213	0.90 (0.75, 1.09)	0.279	
	BOOST II AUS	155 (64.3)	241	155 (64.6)	240	1.00 (0.88, 1.14)	0.993	
	NeOProM	**602 (57.2)**	**1053**	**604 (57.4)**	**1053**	**0.99 (0.92, 1.06)**	**0.739**	
GA>=26 wks	SUPPORT	116 (31.4)	369	126 (34.1)	369	0.92 (0.75, 1.14)	0.457	
	COT	151 (44.2)	342	156 (45.0)	347	0.97 (0.83, 1.14)	0.734	
	BOOST NZ	50 (51.0)	98	44 (44.9)	98	1.15 (0.87, 1.53)	0.319	
	BOOST II UK	96 (35.8)	268	75 (27.8)	270	1.30 (1.01, 1.68)	0.044	
	BOOST II AUS	124 (38.0)	326	122 (37.4)	326	0.99 (0.81, 1.20)	0.899	
	NeOProM	**537 (38.3)**	**1403**	**523 (37.1)**	**1410**	**1.03 (0.94, 1.13)**	**0.493**	
Inborn	SUPPORT	234 (36.9)	635	242 (37.5)	645	0.99 (0.86, 1.15)	0.899	0.006
	COT	304 (54.1)	562	306 (56.4)	543	0.95 (0.86, 1.05)	0.305	
	BOOST NZ	98 (61.6)	159	86 (54.8)	157	1.13 (0.94, 1.36)	0.185	
	BOOST II UK	169 (39.8)	425	168 (39.6)	424	1.01 (0.86, 1.18)	0.948	
	BOOST II AUS	251 (48.0)	523	259 (49.4)	524	0.96 (0.85, 1.09)	0.564	
	NeOProM	**1056 (45.8)**	**2304**	**1061 (46.3)**	**2293**	**0.99 (0.93, 1.05)**	**0.717**	
Outborn	SUPPORT		.		.		.	
	COT	20 (50.0)	40	26 (46.4)	56	1.05 (0.72, 1.54)	0.786	
	BOOST NZ	6 (54.5)	11	4 (30.8)	13	1.54 (0.70, 3.39)	0.279	
	BOOST II UK	29 (50.9)	57	18 (30.5)	59	1.61 (1.06, 2.43)	0.024	
	BOOST II AUS	28 (63.6)	44	18 (42.9)	42	1.47 (0.97, 2.24)	0.070	
	NeOProM	**83 (54.6)**	**152**	**66 (38.8)**	**170**	**1.35 (1.08, 1.69)**	**0.008**	
Vaginal	SUPPORT	64 (30.6)	209	80 (36.9)	217	0.81 (0.62, 1.08)	0.149	0.533
	COT	107 (48.2)	222	122 (50.2)	243	0.95 (0.79, 1.14)	0.586	
	BOOST NZ	40 (53.3)	75	40 (50.6)	79	1.05 (0.77, 1.44)	0.746	
	BOOST II UK	124 (42.9)	289	120 (40.3)	298	1.09 (0.90, 1.32)	0.398	
	BOOST II AUS	148 (54.4)	272	121 (47.1)	257	1.15 (0.98, 1.36)	0.094	
	NeOProM	**483 (45.3)**	**1067**	**483 (44.1)**	**1094**	**1.04 (0.94, 1.14)**	**0.451**	
Caesarean	SUPPORT	170 (39.9)	426	162 (37.9)	428	1.08 (0.90, 1.28)	0.413	
	COT	214 (56.8)	377	209 (58.9)	355	0.95 (0.84, 1.07)	0.404	
	BOOST NZ	64 (67.4)	95	50 (54.9)	91	1.24 (1.00, 1.54)	0.051	
	BOOST II UK	74 (38.3)	193	66 (35.7)	185	1.01 (0.81, 1.27)	0.935	
	BOOST II AUS	131 (44.6)	294	155 (50.8)	305	0.88 (0.74, 1.04)	0.121	
	NeOProM	**653 (47.1)**	**1385**	**642 (47.1)**	**1364**	**1.00 (0.92, 1.07)**	**0.909**	
ANS - No	SUPPORT	9 (42.9)	21	13 (44.8)	29	0.99 (0.52, 1.87)	0.971	0.212
	COT	39 (55.7)	70	36 (59.0)	61	0.96 (0.73, 1.26)	0.769	
	BOOST NZ	14 (70.0)	20	6 (33.3)	18	1.77 (0.92, 3.42)	0.089	
	BOOST II UK	16 (40.0)	40	15 (31.3)	48	2.28 (0.87, 5.98)	0.094	

eTable 24. Patent ductus arteriosus (PDA) medically or surgically treated, by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	BOOST II AUS	34 (53.1)	64	19 (45.2)	42	1.16 (0.76, 1.77)	0.480	
	NeOProM	**112 (52.1)**	**215**	**89 (44.9)**	**198**	**1.12 (0.92, 1.36)**	**0.259**	
ANS - Yes	SUPPORT	225 (36.6)	614	229 (37.2)	615	1.00 (0.86, 1.16)	0.960	
	COT	283 (53.4)	530	295 (55.0)	536	0.95 (0.86, 1.06)	0.390	
	BOOST NZ	90 (60.0)	150	84 (55.3)	152	1.10 (0.91, 1.33)	0.308	
	BOOST II UK	182 (41.4)	440	171 (39.5)	433	1.04 (0.89, 1.21)	0.657	
	BOOST II AUS	243 (48.5)	501	256 (49.4)	518	0.98 (0.87, 1.11)	0.727	
	NeOProM	**1023 (45.8)**	**2235**	**1035 (45.9)**	**2254**	**1.00 (0.94, 1.06)**	**0.910**	
Male	SUPPORT	130 (39.5)	329	144 (39.5)	365	1.01 (0.84, 1.22)	0.936	0.722
	COT	181 (55.0)	329	183 (56.1)	326	0.99 (0.87, 1.14)	0.922	
	BOOST NZ	55 (61.1)	90	48 (53.3)	90	1.14 (0.90, 1.46)	0.279	
	BOOST II UK	108 (42.2)	256	104 (40.6)	256	1.08 (0.89, 1.32)	0.433	
	BOOST II AUS	147 (50.2)	293	141 (47.6)	296	1.01 (0.85, 1.19)	0.950	
	NeOProM	**621 (47.9)**	**1297**	**620 (46.5)**	**1333**	**1.03 (0.95, 1.11)**	**0.521**	
Female	SUPPORT	104 (34.0)	306	98 (35.0)	280	0.98 (0.78, 1.23)	0.843	
	COT	143 (52.4)	273	149 (54.6)	273	0.96 (0.82, 1.11)	0.550	
	BOOST NZ	49 (61.3)	80	42 (52.5)	80	1.18 (0.90, 1.56)	0.227	
	BOOST II UK	90 (39.8)	226	82 (36.1)	227	1.06 (0.83, 1.34)	0.634	
	BOOST II AUS	132 (48.2)	274	136 (50.4)	270	1.01 (0.85, 1.19)	0.953	
	NeOProM	**518 (44.7)**	**1159**	**507 (44.9)**	**1130**	**1.01 (0.92, 1.10)**	**0.853**	
Singleton	SUPPORT	171 (35.5)	482	165 (34.8)	474	1.02 (0.86, 1.21)	0.829	0.792
	COT	206 (52.0)	396	217 (52.0)	417	1.00 (0.88, 1.14)	0.996	
	BOOST NZ	72 (58.1)	124	67 (54.0)	124	1.07 (0.86, 1.34)	0.523	
	BOOST II UK	121 (35.2)	344	131 (37.6)	348	0.93 (0.77, 1.14)	0.500	
	BOOST II AUS	199 (46.4)	429	199 (46.1)	432	1.01 (0.87, 1.16)	0.924	
	NeOProM	**769 (43.3)**	**1775**	**779 (43.4)**	**1795**	**1.00 (0.93, 1.08)**	**0.921**	
Multiple	SUPPORT	63 (41.2)	153	77 (45.0)	171	0.92 (0.70, 1.22)	0.574	
	COT	118 (57.3)	206	115 (63.2)	182	0.90 (0.78, 1.04)	0.138	
	BOOST NZ	32 (69.6)	46	23 (50.0)	46	1.42 (1.03, 1.97)	0.032	
	BOOST II UK	77 (55.8)	138	55 (40.7)	135	1.23 (1.00, 1.51)	0.045	
	BOOST II AUS	80 (58.0)	138	78 (58.2)	134	0.98 (0.82, 1.17)	0.817	
	NeOProM	**370 (54.3)**	**681**	**348 (52.1)**	**668**	**1.02 (0.93, 1.11)**	**0.710**	
start<6 hrs	SUPPORT	230 (36.9)	623	239 (37.7)	634	0.99 (0.85, 1.15)	0.868	0.650
	COT	18 (66.7)	27	15 (57.7)	26	1.18 (0.79, 1.75)	0.420	
	BOOST NZ	19 (67.9)	28	16 (57.1)	28	1.13 (0.75, 1.68)	0.559	
	BOOST II UK		.		.		.	
	BOOST II AUS	28 (47.5)	59	28 (46.7)	60	0.91 (0.57, 1.46)	0.693	
	NeOProM	**295 (40.0)**	**737**	**298 (39.8)**	**748**	**1.03 (0.91, 1.16)**	**0.673**	
>=6 hrs	SUPPORT	2 (40.0)	5	1 (20.0)	5	1.85 (0.23, 14.9)	0.562	
	COT	306 (53.2)	575	317 (55.3)	573	0.95 (0.86, 1.05)	0.314	
	BOOST NZ	85 (59.9)	142	73 (51.8)	141	1.16 (0.95, 1.43)	0.143	

eTable 24. Patent ductus arteriosus (PDA) medically or surgically treated, by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	BOOST II UK		.		.		.	
	BOOST II AUS	249 (49.2)	506	249 (49.3)	505	1.00 (0.89, 1.13)	0.999	
	NeOProM	**642 (52.3)**	**1228**	**640 (52.3)**	**1224**	**0.99 (0.92, 1.07)**	**0.871**	
Original	SUPPORT	234 (36.9)	635	242 (37.5)	645	0.99 (0.86, 1.15)	0.899	0.985
software	COT	149 (52.1)	286	148 (53.2)	278	0.96 (0.82, 1.11)	0.572	
	BOOST NZ	104 (61.2)	170	90 (52.9)	170	1.17 (0.97, 1.40)	0.097	
	BOOST II UK	46 (40.7)	113	47 (41.2)	114	1.04 (0.75, 1.42)	0.827	
	BOOST II AUS	165 (47.7)	346	166 (48.1)	345	0.98 (0.84, 1.15)	0.807	
	NeOProM	**698 (45.0)**	**1550**	**693 (44.7)**	**1552**	**1.01 (0.94, 1.10)**	**0.711**	
Revised	SUPPORT		.		.		.	
software	COT	158 (55.6)	284	158 (56.6)	279	0.96 (0.83, 1.11)	0.598	
	BOOST NZ		.		.		.	
	BOOST II UK	152 (41.2)	369	139 (37.7)	369	1.07 (0.91, 1.27)	0.410	
	BOOST II AUS	114 (51.6)	221	111 (50.2)	221	1.03 (0.87, 1.22)	0.714	
	NeOProM	**424 (48.5)**	**874**	**408 (47.0)**	**869**	**1.01 (0.92, 1.11)**	**0.865**	
SGA:	SUPPORT	223 (37.5)	594	228 (38.4)	594	0.98 (0.85, 1.14)	0.830	0.307
Trialist	COT	299 (54.6)	548	300 (54.7)	548	0.98 (0.88, 1.08)	0.641	
defined -	BOOST II NZ	91 (59.5)	153	81 (51.6)	157	1.17 (0.96, 1.43)	0.109	
No	BOOST II UK	170 (41.9)	406	157 (38.5)	408	1.09 (0.92, 1.28)	0.322	
	BOOST II AUS	243 (49.9)	487	237 (48.6)	488	1.01 (0.89, 1.15)	0.845	
	NeOProM	**1026(46.9)**	**2188**	**1003(45.7)**	**2195**	**1.02 (0.96, 1.09)**	**0.487**	
Yes	SUPPORT	11 (26.8)	41	14 (27.5)	51	0.97 (0.49, 1.90)	0.922	
	COT	25 (46.3)	54	32 (62.7)	51	0.73 (0.51, 1.04)	0.085	
	BOOST II NZ	13 (76.5)	17	9 (69.2)	13	1.40 (1.03, 1.92)	0.033	
	BOOST II UK	28 (37.8)	74	27 (37.5)	72	0.35 (0.05, 2.24)	0.265	
	BOOST II AUS	36 (45.0)	80	40 (51.3)	78	0.88 (0.63, 1.21)	0.421	
	NeOProM	**113 (42.5)**	**266**	**122 (46.0)**	**265**	**0.91 (0.76, 1.09)**	**0.308**	
SGA:	SUPPORT	200 (36.8)	543	208 (39.0)	534	0.95 (0.81, 1.11)	0.535	0.433
NeOProM	COT	299 (54.6)	548	300 (54.7)	548	0.98 (0.88, 1.08)	0.641	
defined -	BOOST II NZ	91 (59.5)	153	81 (51.6)	157	1.17 (0.96, 1.43)	0.109	
No	BOOST II UK	177 (41.5)	426	163 (38.2)	427	1.09 (0.93, 1.28)	0.307	
	BOOST II AUS	243 (49.9)	487	237 (48.6)	488	1.01 (0.89, 1.15)	0.845	
	NeOProM	**1010(46.8)**	**2157**	**989 (45.9)**	**2154**	**1.02 (0.96, 1.08)**	**0.580**	
Yes	SUPPORT	34 (37.0)	92	34 (30.6)	111	1.27 (0.87, 1.85)	0.218	
	COT	25 (46.3)	54	32 (62.7)	51	0.73 (0.51, 1.04)	0.085	
	BOOST II NZ	13 (76.5)	17	9 (69.2)	13	1.40 (1.03, 1.92)	0.033	
	BOOST II UK	21 (37.5)	56	23 (41.1)	56	0.91 (0.57, 1.46)	0.692	
	BOOST II AUS	36 (45.0)	80	40 (51.3)	78	0.88 (0.63, 1.21)	0.421	
	NeOProM	**129 (43.1)**	**299**	**138 (44.7)**	**309**	**0.94 (0.80, 1.12)**	**0.499**	

* Analysis adjusted for trials and multiple births

Abbreviations/definitions

CI: confidence interval; RR: relative risk; GA: gestational age; SUPPORT: Surfactant Positive Airway Pressure and Pulse Oximetry Trial; COT: Canadian Oxygen Trial; BOOST: Benefits of Oxygen Saturation Targeting; NZ: New Zealand; UK: United Kingdom; AUS: Australia; NeOProM: Neonatal Oxygenation Prospective Meta-analysis; inborn: born inside the treating center; outborn: born outside the treating center (e.g. transferred from another hospital; vaginal: mode of delivery through the vagina; Caesarean: mode of delivery via surgical procedure; ANS: antenatal corticosteroids; singleton: child born as a single birth; multiple: more than one child per birth; start<6 hrs: intervention commenced less than 6 hours after birth; start>=6 hrs: intervention commenced greater than or equal to 6 hours after birth; original software: original oximeter software; revised software: revised oximeter software; SGA: small for gestational age; SGA NeOProM defined: small for gestational age as per definition used by NeOProM collaboration, i.e. less than 10th percentile using charts from Kramer et al.[1]

The subgroup analysis by oximeter software type (original vs revised) excludes n=74 infants in COT who were exposed to both the original and revised software.

Empty cells (.) indicate data not collected or not applicable in this trial.

eTable 25. Patent ductus arteriosus (PDA) surgically treated, by subgroups

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
GA<26 wks	SUPPORT	48 (17.8)	269	44 (15.8)	278	1.12 (0.76, 1.64)	0.569	0.184
	COT	67 (25.8)	260	66 (26.2)	252	0.98 (0.73, 1.30)	0.882	
	BOOST NZ	9 (12.5)	72	9 (12.5)	72	1.02 (0.50, 2.07)	0.957	
	BOOST II UK	37 (17.3)	214	34 (16.0)	213	1.09 (0.71, 1.67)	0.694	
	BOOST II AUS	29 (12.0)	241	20 (8.4)	238	3.85 (1.38, 10.7)	0.010	
	NeOProM	**190 (18.0)**	**1056**	**173 (16.4)**	**1053**	**1.09 (0.91, 1.31)**	**0.357**	
GA>=26 wks	SUPPORT	25 (6.7)	372	24 (6.5)	370	1.11 (0.62, 1.96)	0.726	
	COT	30 (8.8)	342	27 (7.8)	347	1.16 (0.71, 1.90)	0.563	
	BOOST NZ	3 (3.1)	98	2 (2.0)	98	1.56 (0.26, 9.25)	0.627	
	BOOST II UK	25 (9.3)	268	11 (4.1)	270	1.88 (0.83, 4.26)	0.130	
	BOOST II AUS	8 (2.5)	326	3 (0.9)	326	2.66 (0.72, 9.85)	0.143	
	NeOProM	**91 (6.5)**	**1406**	**67 (4.7)**	**1411**	**1.38 (1.02, 1.89)**	**0.039**	
Inborn	SUPPORT	73 (11.4)	641	68 (10.5)	648	1.11 (0.80, 1.53)	0.535	0.367
	COT	91 (16.2)	562	85 (15.7)	543	1.04 (0.80, 1.36)	0.774	
	BOOST NZ	11 (6.9)	159	10 (6.4)	157	1.07 (0.53, 2.18)	0.847	
	BOOST II UK	54 (12.7)	425	40 (9.4)	424	1.32 (0.89, 1.96)	0.173	
	BOOST II AUS	33 (6.3)	523	23 (4.4)	522	1.79 (1.08, 2.98)	0.024	
	NeOProM	**262 (11.3)**	**2310**	**226 (9.9)**	**2294**	**1.16 (0.98, 1.37)**	**0.089**	
Outborn	SUPPORT		.		.		.	
	COT	6 (15.0)	40	8 (14.3)	56	1.05 (0.40, 2.79)	0.872	
	BOOST NZ	1 (9.1)	11	1 (7.7)	13	1.17 (0.09, 15.9)	0.907	
	BOOST II UK	8 (14.0)	57	5 (8.5)	59	1.67 (0.57, 4.87)	0.352	
	BOOST II AUS	4 (9.1)	44	0	42		***	
	NeOProM	**19 (12.5)**	**152**	**14 (8.2)**	**170**	**1.55 (0.84, 2.86)**	**0.157**	
Vaginal	SUPPORT	24 (11.3)	212	26 (12.0)	217	0.82 (0.47, 1.43)	0.492	0.110
	COT	33 (14.9)	222	37 (15.2)	243	0.93 (0.61, 1.42)	0.732	
	BOOST NZ	6 (8.0)	75	5 (6.3)	79	1.23 (0.39, 3.88)	0.723	
	BOOST II UK	37 (12.8)	289	36 (12.1)	298	1.06 (0.69, 1.63)	0.794	
	BOOST II AUS	19 (7.0)	272	13 (5.1)	257	1.91 (0.61, 5.94)	0.263	
	NeOProM	**119 (11.1)**	**1070**	**117 (10.7)**	**1094**	**1.01 (0.78, 1.29)**	**0.967**	
Caesarean	SUPPORT	49 (11.4)	429	42 (9.7)	431	1.23 (0.83, 1.84)	0.304	
	COT	64 (17.0)	377	55 (15.5)	355	1.11 (0.81, 1.54)	0.514	
	BOOST NZ	6 (6.3)	95	6 (6.6)	91	0.86 (0.38, 1.97)	0.723	
	BOOST II UK	25 (13.0)	193	9 (4.9)	185	2.12 (0.90, 5.03)	0.087	
	BOOST II AUS	18 (6.1)	294	10 (3.3)	303	2.18 (1.01, 4.73)	0.048	
	NeOProM	**162 (11.7)**	**1388**	**122 (8.9)**	**1365**	**1.33 (1.07, 1.65)**	**0.011**	
ANS - No	SUPPORT	4 (19.0)	21	2 (6.9)	29	2.66 (0.53, 13.3)	0.233	0.399
	COT	11 (15.7)	70	10 (16.4)	61	0.92 (0.41, 2.03)	0.830	
	BOOST NZ	2 (10.0)	20	0	18		***	
	BOOST II UK	3 (7.5)	40	5 (10.4)	48	0.04 (0.00, 10.0)	0.260	

eTable 25. Patent ductus arteriosus (PDA) surgically treated, by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	BOOST II AUS	9 (14.1)	64	1 (2.4)	42	5.94 (0.78, 45.4)	0.086	
	NeOProM	**29 (13.5)**	**215**	**18 (9.1)**	**198**	**1.48 (0.85, 2.58)**	**0.170**	
ANS - Yes	SUPPORT	69 (11.1)	620	66 (10.7)	618	1.07 (0.77, 1.49)	0.688	
	COT	86 (16.2)	530	83 (15.5)	536	1.05 (0.80, 1.37)	0.745	
	BOOST NZ	10 (6.7)	150	11 (7.2)	152	0.91 (0.45, 1.85)	0.793	
	BOOST II UK	59 (13.4)	440	40 (9.2)	433	1.44 (0.98, 2.11)	0.064	
	BOOST II AUS	28 (5.6)	501	22 (4.3)	516	1.79 (1.03, 3.11)	0.040	
	NeOProM	**252 (11.2)**	**2241**	**222 (9.8)**	**2255**	**1.15 (0.97, 1.36)**	**0.103**	
Male	SUPPORT	36 (10.8)	333	38 (10.4)	366	1.12 (0.72, 1.75)	0.624	0.989
	COT	48 (14.6)	329	47 (14.4)	326	1.04 (0.72, 1.49)	0.847	
	BOOST NZ	5 (5.6)	90	6 (6.7)	90	0.83 (0.26, 2.62)	0.751	
	BOOST II UK	33 (12.9)	256	27 (10.5)	256	1.20 (0.76, 1.91)	0.433	
	BOOST II AUS	17 (5.8)	293	7 (2.4)	296	3.60 (1.38, 9.38)	0.009	
	NeOProM	**139 (10.7)**	**1301**	**125 (9.4)**	**1334**	**1.18 (0.94, 1.47)**	**0.156**	
Female	SUPPORT	37 (12.0)	308	30 (10.6)	282	1.09 (0.69, 1.74)	0.712	
	COT	49 (17.9)	273	46 (16.8)	273	1.07 (0.74, 1.53)	0.732	
	BOOST NZ	7 (8.8)	80	5 (6.3)	80	1.11 (0.75, 1.64)	0.614	
	BOOST II UK	29 (12.8)	226	18 (7.9)	227	1.54 (0.87, 2.71)	0.138	
	BOOST II AUS	20 (7.3)	274	16 (6.0)	268	1.34 (0.73, 2.48)	0.344	
	NeOProM	**142 (12.2)**	**1161**	**115 (10.2)**	**1130**	**1.19 (0.94, 1.49)**	**0.141**	
Singleton	SUPPORT	56 (11.5)	485	46 (9.6)	477	1.20 (0.83, 1.73)	0.339	0.346
	COT	64 (16.2)	396	64 (15.3)	417	1.05 (0.77, 1.45)	0.750	
	BOOST NZ	8 (6.5)	124	8 (6.5)	124	1.00 (0.39, 2.58)	1.000	
	BOOST II UK	40 (11.6)	344	23 (6.6)	348	1.76 (1.08, 2.87)	0.024	
	BOOST II AUS	26 (6.1)	429	17 (3.9)	431	1.54 (0.85, 2.79)	0.158	
	NeOProM	**194 (10.9)**	**1778**	**158 (8.8)**	**1797**	**1.24 (1.02, 1.51)**	**0.032**	
Multiple	SUPPORT	17 (10.9)	156	22 (12.9)	171	0.84 (0.43, 1.67)	0.625	
	COT	33 (16.0)	206	29 (15.9)	182	1.02 (0.67, 1.56)	0.922	
	BOOST NZ	4 (8.7)	46	3 (6.5)	46	1.27 (0.58, 2.80)	0.553	
	BOOST II UK	22 (15.9)	138	22 (16.3)	135	0.97 (0.59, 1.62)	0.919	
	BOOST II AUS	11 (8.0)	138	6 (4.5)	133	2.72 (1.21, 6.11)	0.015	
	NeOProM	**87 (12.7)**	**684**	**82 (12.3)**	**667**	**1.06 (0.81, 1.38)**	**0.679**	
start<6 hrs	SUPPORT	71 (11.3)	629	67 (10.5)	637	1.09 (0.79, 1.52)	0.586	0.593
	COT	4 (14.8)	27	5 (19.2)	26	0.77 (0.23, 2.64)	0.679	
	BOOST NZ	2 (7.1)	28	0	28		***	
	BOOST II UK		.		.		.	
	BOOST II AUS	2 (3.4)	59	4 (6.7)	60	0.51 (0.10, 2.62)	0.423	
	NeOProM	**79 (10.6)**	**743**	**76 (10.1)**	**751**	**1.06 (0.78, 1.43)**	**0.726**	
>=6 hrs	SUPPORT	1 (20.0)	5	0	5		***	
	COT	93 (16.2)	575	88 (15.4)	573	1.05 (0.81, 1.36)	0.701	
	BOOST NZ	10 (7.0)	142	11 (7.8)	141	0.91 (0.45, 1.85)	0.791	

eTable 25. Patent ductus arteriosus (PDA) surgically treated, by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	BOOST II UK		.		.		.	
	BOOST II AUS	35 (6.9)	506	19 (3.8)	503	2.55 (1.40, 4.64)	0.002	
	NeOProM	**139 (11.3)**	**1228**	**118 (9.7)**	**1222**	**1.18 (0.94, 1.47)**	**0.148**	
Original	SUPPORT	73 (11.4)	641	68 (10.5)	648	1.11 (0.80, 1.53)	0.535	0.780
software	COT	48 (16.8)	286	47 (16.9)	278	0.99 (0.68, 1.44)	0.969	
	BOOST NZ	12 (7.1)	170	11 (6.5)	170	1.08 (0.54, 2.14)	0.834	
	BOOST II UK	12 (10.6)	113	7 (6.1)	114	1.73 (0.70, 4.26)	0.231	
	BOOST II AUS	20 (5.8)	346	10 (2.9)	344	1.99 (0.95, 4.18)	0.069	
	NeOProM	**165 (10.6)**	**1556**	**143 (9.2)**	**1554**	**1.15 (0.93, 1.42)**	**0.202**	
Revised	SUPPORT		.		.		.	
software	COT	41 (14.4)	284	38 (13.6)	279	1.05 (0.73, 1.52)	0.782	
	BOOST NZ		.		.		.	
	BOOST II UK	50 (13.6)	369	38 (10.3)	369	1.29 (0.85, 1.95)	0.225	
	BOOST II AUS	17 (7.7)	221	13 (5.9)	220	3.98 (0.90, 17.6)	0.068	
	NeOProM	**108 (12.4)**	**874**	**89 (10.3)**	**868**	**1.21 (0.93, 1.57)**	**0.152**	
SGA:	SUPPORT	70 (11.7)	600	64 (10.7)	597	1.11 (0.80, 1.55)	0.537	0.761
Trialist	COT	89 (16.2)	548	87 (15.9)	548	1.01 (0.78, 1.32)	0.914	
defined -	BOOST II NZ	10 (6.5)	153	10 (6.4)	157	1.03 (0.50, 2.13)	0.931	
No	BOOST II UK	56 (13.8)	406	40 (9.8)	408	1.39 (0.94, 2.06)	0.100	
	BOOST II AUS	34 (7.0)	487	20 (4.1)	486	2.43 (1.31, 4.51)	0.005	
	NeOProM	**259 (11.8)**	**2194**	**221 (10.1)**	**2196**	**1.17 (0.99, 1.39)**	**0.066**	
Yes	SUPPORT	3 (7.3)	41	4 (7.8)	51	0.93 (0.22, 3.93)	0.921	
	COT	8 (14.8)	54	6 (11.8)	51	0.97 (0.67, 1.41)	0.865	
	BOOST II NZ	2 (11.8)	17	1 (7.7)	13	1.51 (0.15, 15.0)	0.724	
	BOOST II UK	6 (8.1)	74	4 (5.6)	72		***	
	BOOST II AUS	3 (3.8)	80	3 (3.8)	78	0.98 (0.20, 4.67)	0.975	
	NeOProM	**22 (8.3)**	**266**	**18 (6.8)**	**265**	**1.10 (0.67, 1.80)**	**0.714**	
SGA:	SUPPORT	63 (11.5)	549	57 (10.6)	537	1.11 (0.78, 1.58)	0.567	0.711
NeOProM	COT	89 (16.2)	548	87 (15.9)	548	1.01 (0.78, 1.32)	0.914	
defined -	BOOST II NZ	10 (6.5)	153	10 (6.4)	157	1.03 (0.50, 2.13)	0.931	
No	BOOST II UK	56 (13.1)	426	42 (9.8)	427	1.33 (0.90, 1.96)	0.159	
	BOOST II AUS	34 (7.0)	487	20 (4.1)	486	2.43 (1.31, 4.51)	0.005	
	NeOProM	**252 (11.7)**	**2163**	**216 (10.0)**	**2155**	**1.16 (0.98, 1.38)**	**0.085**	
Yes	SUPPORT	10 (10.9)	92	11 (9.9)	111	1.09 (0.49, 2.46)	0.829	
	COT	8 (14.8)	54	6 (11.8)	51	0.97 (0.67, 1.41)	0.865	
	BOOST II NZ	2 (11.8)	17	1 (7.7)	13	1.51 (0.15, 15.0)	0.724	
	BOOST II UK	6 (10.7)	56	3 (5.4)	56	1.90 (0.52, 6.93)	0.330	
	BOOST II AUS	3 (3.8)	80	3 (3.8)	78	0.98 (0.20, 4.67)	0.975	
	NeOProM	**29 (9.7)**	**299**	**24 (7.8)**	**309**	**1.22 (0.74, 2.03)**	**0.435**	

* Analysis adjusted for trials and multiple births

Abbreviations/definitions

CI: confidence interval; RR: relative risk; GA: gestational age; SUPPORT: Surfactant Positive Airway Pressure and Pulse Oximetry Trial; COT: Canadian Oxygen Trial; BOOST: Benefits of Oxygen Saturation Targeting; NZ: New Zealand; UK: United Kingdom; AUS: Australia; NeOProM: Neonatal Oxygenation Prospective Meta-analysis; inborn: born inside the treating center; outborn: born outside the treating center (e.g. transferred from another hospital; vaginal: mode of delivery through the vagina; Caesarean: mode of delivery via surgical procedure; ANS: antenatal corticosteroids; singleton: child born as a single birth; multiple: more than one child per birth; start<6 hrs: intervention commenced less than 6 hours after birth; start>=6 hrs: intervention commenced greater than or equal to 6 hours after birth; original software: original oximeter software; revised software: revised oximeter software; SGA: small for gestational age; SGA NeOProM defined: small for gestational age as per definition used by NeOProM collaboration, i.e. less than 10th percentile using charts from Kramer et al.[1]

The subgroup analysis by oximeter software type (original vs revised) excludes n=74 infants in COT who were exposed to both the original and revised software.

Empty cells (.) indicate data not collected or not applicable in this trial.

*** Low / no event rate(s) makes parameter not estimable.

eTable 26. Severe necrotizing enterocolitis (NEC), by subgroups

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
GA<26 wks	SUPPORT	31 (11.5)	269	21 (7.6)	278	1.54 (0.90, 2.65)	0.116	0.741
	COT	26 (10.0)	260	24 (9.5)	252	1.05 (0.62, 1.78)	0.855	
	BOOST NZ	7 (9.7)	72	6 (8.3)	72	1.18 (0.42, 3.33)	0.759	
	BOOST II UK	36 (16.8)	214	28 (13.2)	212	1.30 (0.82, 2.06)	0.268	
	BOOST II AUS	29 (12.0)	241	20 (8.3)	240	1.44 (0.84, 2.48)	0.184	
	NeOProM	**129 (12.2)**	**1056**	**99 (9.4)**	**1054**	**1.30 (1.01, 1.66)**	**0.040**	
GA>=26 wks	SUPPORT	20 (5.4)	372	16 (4.3)	371	1.24 (0.66, 2.35)	0.504	
	COT	23 (6.7)	342	12 (3.5)	347	1.88 (0.96, 3.70)	0.065	
	BOOST NZ	8 (8.2)	98	6 (6.1)	98	1.36 (0.49, 3.73)	0.553	
	BOOST II UK	35 (13.0)	270	24 (9.0)	268	1.45 (0.89, 2.35)	0.133	
	BOOST II AUS	12 (3.7)	326	13 (4.0)	327	0.95 (0.43, 2.10)	0.891	
	NeOProM	**98 (7.0)**	**1408**	**71 (5.0)**	**1411**	**1.37 (1.02, 1.84)**	**0.036**	
Inborn	SUPPORT	51 (8.0)	641	37 (5.7)	649	1.41 (0.93, 2.13)	0.107	0.015
	COT	44 (7.8)	562	30 (5.5)	543	1.42 (0.91, 2.21)	0.125	
	BOOST NZ	15 (9.4)	159	11 (7.0)	157	1.37 (0.65, 2.91)	0.406	
	BOOST II UK	64 (15.0)	427	39 (9.3)	421	1.63 (1.12, 2.36)	0.010	
	BOOST II AUS	39 (7.5)	523	29 (5.5)	525	1.37 (0.86, 2.19)	0.181	
	NeOProM	**213 (9.2)**	**2312**	**146 (6.4)**	**2295**	**1.44 (1.18, 1.77)**	**<.001**	
Outborn	SUPPORT		.		.		.	
	COT	5 (12.5)	40	6 (10.7)	56	1.17 (0.38, 3.62)	0.784	
	BOOST NZ	0	11	1 (7.7)	13		***	
	BOOST II UK	7 (12.3)	57	13 (22.0)	59	0.58 (0.25, 1.34)	0.200	
	BOOST II AUS	2 (4.5)	44	4 (9.5)	42	0.51 (0.10, 2.51)	0.405	
	NeOProM	**14 (9.2)**	**152**	**24 (14.1)**	**170**	**0.67 (0.36, 1.25)**	**0.211**	
Vaginal	SUPPORT	20 (9.4)	212	12 (5.5)	217	1.65 (0.82, 3.32)	0.161	0.439
	COT	19 (8.6)	222	16 (6.6)	243	1.30 (0.68, 2.47)	0.422	
	BOOST NZ	3 (4.0)	75	4 (5.1)	79	0.79 (0.19, 3.32)	0.745	
	BOOST II UK	49 (16.8)	291	35 (11.8)	296	1.42 (0.95, 2.13)	0.086	
	BOOST II AUS	25 (9.2)	272	15 (5.8)	257	1.57 (0.85, 2.92)	0.149	
	NeOProM	**116 (10.8)**	**1072**	**82 (7.5)**	**1092**	**1.43 (1.10, 1.88)**	**0.009**	
Caesarean	SUPPORT	31 (7.2)	429	25 (5.8)	432	1.26 (0.75, 2.12)	0.374	
	COT	30 (8.0)	377	20 (5.6)	355	1.41 (0.82, 2.41)	0.212	
	BOOST NZ	12 (12.6)	95	8 (8.8)	91	1.48 (0.63, 3.47)	0.363	
	BOOST II UK	22 (11.4)	193	17 (9.2)	184	1.28 (0.72, 2.29)	0.398	
	BOOST II AUS	16 (5.4)	294	18 (5.9)	306	0.97 (0.50, 1.90)	0.930	
	NeOProM	**111 (8.0)**	**1388**	**88 (6.4)**	**1368**	**1.24 (0.94, 1.62)**	**0.125**	
ANS - No	SUPPORT	3 (14.3)	21	0	29		***	0.242
	COT	10 (14.3)	70	5 (8.2)	61	1.72 (0.62, 4.73)	0.297	
	BOOST NZ	1 (5.0)	20	0	18		***	
	BOOST II UK	6 (15.0)	40	5 (10.6)	47	1.41 (0.46, 4.32)	0.542	

eTable 26. Severe necrotizing enterocolitis (NEC), by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	BOOST II AUS	6 (9.4)	64	3 (7.1)	42	1.33 (0.35, 5.12)	0.676	
	NeOProM	**26 (12.1)**	**215**	**13 (6.6)**	**197**	**1.85 (0.96, 3.54)**	**0.065**	
ANS - Yes	SUPPORT	48 (7.7)	620	37 (6.0)	619	1.30 (0.86, 1.99)	0.215	
	COT	39 (7.4)	530	31 (5.8)	536	1.27 (0.81, 1.99)	0.299	
	BOOST NZ	14 (9.3)	150	12 (7.9)	152	1.21 (0.58, 2.53)	0.617	
	BOOST II UK	64 (14.5)	442	46 (10.7)	431	1.38 (0.97, 1.96)	0.075	
	BOOST II AUS	35 (7.0)	501	30 (5.8)	519	1.22 (0.76, 1.97)	0.404	
	NeOProM	**200 (8.9)**	**2243**	**156 (6.9)**	**2257**	**1.28 (1.05, 1.56)**	**0.016**	
Male	SUPPORT	28 (8.4)	333	22 (6.0)	366	1.39 (0.81, 2.38)	0.227	0.384
	COT	26 (7.9)	329	20 (6.1)	326	1.29 (0.73, 2.25)	0.380	
	BOOST NZ	11 (12.2)	90	7 (7.8)	90	1.62 (0.66, 3.99)	0.295	
	BOOST II UK	48 (18.7)	257	30 (11.8)	254	1.58 (1.04, 2.39)	0.032	
	BOOST II AUS	27 (9.2)	293	21 (7.1)	296	1.32 (0.76, 2.32)	0.327	
	NeOProM	**140 (10.8)**	**1302**	**100 (7.5)**	**1332**	**1.43 (1.12, 1.82)**	**0.004**	
Female	SUPPORT	23 (7.5)	308	15 (5.3)	283	1.39 (0.73, 2.63)	0.314	
	COT	23 (8.4)	273	16 (5.9)	273	1.41 (0.77, 2.61)	0.267	
	BOOST NZ	4 (5.0)	80	5 (6.3)	80	0.80 (0.22, 2.88)	0.728	
	BOOST II UK	23 (10.1)	227	22 (9.7)	226	1.04 (0.60, 1.80)	0.891	
	BOOST II AUS	14 (5.1)	274	12 (4.4)	271	1.15 (0.54, 2.45)	0.709	
	NeOProM	**87 (7.5)**	**1162**	**70 (6.2)**	**1133**	**1.20 (0.88, 1.62)**	**0.243**	
Singleton	SUPPORT	40 (8.2)	485	25 (5.2)	477	1.57 (0.97, 2.55)	0.066	0.034
	COT	36 (9.1)	396	23 (5.5)	417	1.65 (0.99, 2.73)	0.052	
	BOOST NZ	11 (8.9)	124	9 (7.3)	124	1.22 (0.52, 2.85)	0.642	
	BOOST II UK	57 (16.5)	346	36 (10.4)	345	1.58 (1.07, 2.33)	0.022	
	BOOST II AUS	34 (7.9)	429	26 (6.0)	432	1.32 (0.80, 2.16)	0.274	
	NeOProM	**178 (10.0)**	**1780**	**119 (6.6)**	**1795**	**1.51 (1.21, 1.88)**	**<.001**	
Multiple	SUPPORT	11 (7.1)	156	12 (7.0)	172	1.00 (0.44, 2.31)	0.993	
	COT	13 (6.3)	206	13 (7.1)	182	0.88 (0.43, 1.82)	0.737	
	BOOST NZ	4 (8.7)	46	3 (6.5)	46	1.44 (0.33, 6.22)	0.623	
	BOOST II UK	14 (10.1)	138	16 (11.9)	135	0.88 (0.46, 1.67)	0.691	
	BOOST II AUS	7 (5.1)	138	7 (5.2)	135	1.02 (0.35, 3.01)	0.965	
	NeOProM	**49 (7.2)**	**684**	**51 (7.6)**	**670**	**0.93 (0.64, 1.36)**	**0.712**	
start<6 hrs	SUPPORT	51 (8.1)	629	37 (5.8)	638	1.41 (0.93, 2.13)	0.105	0.792
	COT	0	27	1 (3.8)	26		***	
	BOOST NZ	1 (3.6)	28	0	28		***	
	BOOST II UK		.		.		.	
	BOOST II AUS	2 (3.4)	59	1 (1.7)	60	2.21 (0.23, 21.0)	0.492	
	NeOProM	**54 (7.3)**	**743**	**39 (5.2)**	**752**	**1.41 (0.94, 2.11)**	**0.097**	
>=6 hrs	SUPPORT	0	5	0	5		***	
	COT	49 (8.5)	575	35 (6.1)	573	1.40 (0.92, 2.14)	0.113	
	BOOST NZ	14 (9.9)	142	11 (7.8)	141	1.28 (0.60, 2.73)	0.519	

eTable 26. Severe necrotizing enterocolitis (NEC), by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	BOOST II UK		.		.		.	
	BOOST II AUS	39 (7.7)	506	32 (6.3)	506	1.23 (0.78, 1.94)	0.368	
	NeOProM	**102 (8.3)**	**1228**	**78 (6.4)**	**1225**	**1.30 (0.98, 1.73)**	**0.071**	
Original	SUPPORT	51 (8.0)	641	37 (5.7)	649	1.41 (0.93, 2.13)	0.107	0.672
software	COT	22 (7.7)	286	15 (5.4)	278	1.41 (0.75, 2.66)	0.281	
	BOOST NZ	15 (8.8)	170	12 (7.1)	170	1.27 (0.61, 2.65)	0.516	
	BOOST II UK	17 (15.0)	113	11 (9.6)	114	1.52 (0.75, 3.07)	0.242	
	BOOST II AUS	23 (6.6)	346	16 (4.6)	346	1.44 (0.77, 2.68)	0.252	
	NeOProM	**128 (8.2)**	**1556**	**91 (5.8)**	**1557**	**1.40 (1.08, 1.82)**	**0.010**	
Revised	SUPPORT		.		.		.	
software	COT	24 (8.5)	284	15 (5.4)	279	1.59 (0.85, 2.97)	0.149	
	BOOST NZ		.		.		.	
	BOOST II UK	54 (14.6)	371	41 (11.2)	366	1.34 (0.92, 1.96)	0.123	
	BOOST II AUS	18 (8.1)	221	17 (7.7)	221	1.13 (0.59, 2.17)	0.712	
	NeOProM	**96 (11.0)**	**876**	**73 (8.4)**	**866**	**1.30 (0.97, 1.74)**	**0.074**	
SGA:	SUPPORT	46 (7.7)	600	35 (5.9)	598	1.32 (0.85, 2.03)	0.213	0.098
Trialist	COT	47 (8.6)	548	34 (6.2)	548	1.39 (0.91, 2.13)	0.132	
defined -	BOOST II NZ	12 (7.8)	153	11 (7.0)	157	1.14 (0.52, 2.50)	0.747	
No	BOOST II UK	58 (14.3)	407	48 (11.9)	405	1.21 (0.85, 1.73)	0.299	
	BOOST II AUS	34 (7.0)	487	28 (5.7)	489	1.24 (0.76, 2.01)	0.390	
	NeOProM	**197 (9.0)**	**2195**	**156 (7.1)**	**2197**	**1.26 (1.03, 1.54)**	**0.025**	
Yes	SUPPORT	5 (12.2)	41	2 (3.9)	51	3.11 (0.63, 15.2)	0.162	
	COT	2 (3.7)	54	2 (3.9)	51	0.94 (0.14, 6.41)	0.953	
	BOOST II NZ	3 (17.6)	17	1 (7.7)	13	2.27 (0.26, 19.5)	0.456	
	BOOST II UK	13 (17.3)	75	4 (5.6)	72	3.12 (1.07, 9.12)	0.018	
	BOOST II AUS	7 (8.8)	80	5 (6.4)	78	1.43 (0.53, 3.92)	0.481	
	NeOProM	**30 (11.2)**	**267**	**14 (5.3)**	**265**	**2.11 (1.15, 3.87)**	**0.02**	
SGA:	SUPPORT	42 (7.7)	549	29 (5.4)	538	1.42 (0.89, 2.26)	0.143	0.410
NeOProM	COT	47 (8.6)	548	34 (6.2)	548	1.39 (0.91, 2.13)	0.132	
defined -	BOOST II NZ	12 (7.8)	153	11 (7.0)	157	1.14 (0.52, 2.50)	0.747	
No	BOOST II UK	63 (14.8)	427	50 (11.8)	424	1.27 (0.90, 1.79)	0.180	
	BOOST II AUS	34 (7.0)	487	28 (5.7)	489	1.24 (0.76, 2.01)	0.390	
	NeOProM	**198 (9.1)**	**2164**	**152 (7.1)**	**2156**	**1.29 (1.06, 1.59)**	**0.013**	
Yes	SUPPORT	9 (9.8)	92	8 (7.2)	111	1.24 (0.50, 3.08)	0.636	
	COT	2 (3.7)	54	2 (3.9)	51	0.94 (0.14, 6.41)	0.953	
	BOOST II NZ	3 (17.6)	17	1 (7.7)	13	2.27 (0.26, 19.5)	0.456	
	BOOST II UK	8 (14.0)	57	2 (3.6)	56	3.93 (0.87, 17.70)	0.368	
	BOOST II AUS	7 (8.8)	80	5 (6.4)	78	1.43 (0.53, 3.92)	0.481	
	NeOProM	**29 (9.7)**	**300**	**18 (5.8)**	**309**	**1.67 (0.96, 2.92)**	**0.070**	

* Analysis adjusted for trials and multiple births

Abbreviations/definitions

CI: confidence interval; RR: relative risk; GA: gestational age; SUPPORT: Surfactant Positive Airway Pressure and Pulse Oximetry Trial; COT: Canadian Oxygen Trial; BOOST: Benefits of Oxygen Saturation Targeting; NZ: New Zealand; UK: United Kingdom; AUS: Australia; NeOProM: Neonatal Oxygenation Prospective Meta-analysis; inborn: born inside the treating center; outborn: born outside the treating center (e.g. transferred from another hospital; vaginal: mode of delivery through the vagina; Caesarean: mode of delivery via surgical procedure; ANS: antenatal corticosteroids; singleton: child born as a single birth; multiple: more than one child per birth; start<6 hrs: intervention commenced less than 6 hours after birth; start>=6 hrs: intervention commenced greater than or equal to 6 hours after birth; original software: original oximeter software; revised software: revised oximeter software; SGA: small for gestational age; SGA NeOProM defined: small for gestational age as per definition used by NeOProM collaboration, i.e. less than 10th percentile using charts from Kramer et al.[1]

The subgroup analysis by oximeter software type (original vs revised) excludes n=74 infants in COT who were exposed to both the original and revised software.

Empty cells (.) indicate data not collected or not applicable in this trial.

*** Low / no event rate(s) makes parameter not estimable.

eTable 27. Treated retinopathy of prematurity (ROP), by subgroups

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
GA<26 wks	SUPPORT	29 (16.6)	175	67 (33.3)	201	0.47 (0.32, 0.71)	<.001	0.883
	COT	47 (23.7)	198	50 (26.0)	192	0.85 (0.61, 1.17)	0.324	
	BOOST NZ	11 (17.7)	62	8 (12.7)	63	1.27 (0.60, 2.69)	0.527	
	BOOST II UK	49 (33.6)	146	66 (42.3)	156	0.80 (0.59, 1.07)	0.129	
	BOOST II AUS	22 (12.3)	179	33 (17.1)	193	0.72 (0.43, 1.18)	0.193	
	NeOProM	**158 (20.8)**	**760**	**224 (27.8)**	**805**	**0.74 (0.62, 0.87)**	**<.001**	
GA>=26 wks	SUPPORT	7 (2.3)	307	26 (8.3)	313	0.28 (0.12, 0.63)	0.002	
	COT	17 (5.6)	302	16 (5.1)	311	0.96 (0.49, 1.87)	0.893	
	BOOST NZ	3 (3.1)	96	5 (5.7)	87	0.35 (0.01, 15.9)	0.593	
	BOOST II UK	20 (8.1)	247	22 (9.0)	245	0.93 (0.52, 1.65)	0.794	
	BOOST II AUS	15 (4.9)	308	15 (4.9)	304	0.98 (0.49, 1.98)	0.965	
	NeOProM	**62 (4.9)**	**1260**	**84 (6.7)**	**1260**	**0.76 (0.55, 1.04)**	**0.087**	
Inborn	SUPPORT	36 (7.5)	482	93 (18.1)	514	0.41 (0.28, 0.60)	<.001	0.994
	COT	59 (12.6)	468	56 (12.1)	461	0.95 (0.69, 1.32)	0.766	
	BOOST NZ	13 (8.8)	148	13 (9.3)	140	0.82 (0.41, 1.63)	0.577	
	BOOST II UK	61 (17.6)	347	79 (22.4)	353	0.81 (0.60, 1.09)	0.162	
	BOOST II AUS	35 (7.7)	452	45 (9.6)	468	0.81 (0.53, 1.24)	0.331	
	NeOProM	**204 (10.8)**	**1897**	**286 (14.8)**	**1936**	**0.74 (0.62, 0.87)**	**<.001**	
Outborn	SUPPORT		.		.		.	
	COT	5 (15.6)	32	10 (23.8)	42	0.66 (0.25, 1.73)	0.459	
	BOOST NZ	1 (10.0)	10	0	10		***	
	BOOST II UK	8 (17.4)	46	9 (18.8)	48	0.94 (0.39, 2.24)	0.882	
	BOOST II AUS	2 (5.7)	35	3 (10.3)	29	0.62 (0.12, 3.11)	0.559	
	NeOProM	**16 (13.0)**	**123**	**22 (17.1)**	**129**	**0.78 (0.44, 1.40)**	**0.412**	
Vaginal	SUPPORT	14 (8.9)	158	22 (13.0)	169	0.62 (0.32, 1.18)	0.146	0.010
	COT	26 (14.4)	180	24 (11.9)	202	1.22 (0.73, 2.03)	0.454	
	BOOST NZ	9 (13.8)	65	6 (9.1)	66	1.27 (0.77, 2.09)	0.352	
	BOOST II UK	51 (22.5)	227	55 (23.2)	237	0.98 (0.70, 1.38)	0.919	
	BOOST II AUS	16 (7.1)	225	25 (11.4)	220	0.63 (0.34, 1.14)	0.128	
	NeOProM	**116 (13.6)**	**855**	**132 (14.8)**	**894**	**0.92 (0.74, 1.16)**	**0.484**	
Caesarean	SUPPORT	22 (6.8)	324	71 (20.6)	345	0.34 (0.21, 0.54)	<.001	
	COT	38 (11.9)	319	42 (14.0)	300	0.75 (0.51, 1.11)	0.146	
	BOOST NZ	5 (5.4)	93	7 (8.3)	84	0.51 (0.15, 1.72)	0.277	
	BOOST II UK	18 (10.8)	166	33 (20.1)	164	0.56 (0.33, 0.94)	0.030	
	BOOST II AUS	21 (8.0)	261	23 (8.4)	274	0.98 (0.55, 1.74)	0.946	
	NeOProM	**104 (8.9)**	**1163**	**176 (15.1)**	**1167**	**0.60 (0.48, 0.75)**	**<.001**	
ANS - No	SUPPORT	0	19	2 (8.7)	23		***	0.165
	COT	4 (8.2)	49	13 (27.7)	47	0.29 (0.10, 0.83)	0.022	
	BOOST NZ	1 (5.9)	17	0	13		***	
	BOOST II UK	2 (6.7)	30	5 (16.7)	30	0.27 (0.05, 1.49)	0.134	

eTable 27. Treated retinopathy of prematurity (ROP), by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	BOOST II AUS	6 (11.5)	52	4 (12.9)	31	0.89 (0.27, 2.95)	0.853	
	NeOProM	**13 (7.8)**	**167**	**24 (16.7)**	**144**	**0.45 (0.24, 0.84)**	**0.012**	
ANS - Yes	SUPPORT	36 (7.8)	463	91 (18.5)	491	0.42 (0.29, 0.61)	<.001	
	COT	60 (13.3)	450	53 (11.6)	456	1.01 (0.73, 1.41)	0.945	
	BOOST NZ	13 (9.2)	141	13 (9.5)	137	0.85 (0.43, 1.68)	0.632	
	BOOST II UK	66 (18.3)	361	83 (22.5)	369	0.83 (0.62, 1.11)	0.204	
	BOOST II AUS	31 (7.2)	433	44 (9.5)	461	0.75 (0.48, 1.17)	0.210	
	NeOProM	**206 (11.1)**	**1848**	**284 (14.8)**	**1914**	**0.75 (0.64, 0.89)**	**<.001**	
Male	SUPPORT	20 (8.1)	247	55 (19.6)	281	0.38 (0.23, 0.63)	<.001	0.212
	COT	34 (12.5)	271	40 (15.3)	261	0.72 (0.46, 1.11)	0.136	
	BOOST NZ	7 (8.5)	82	8 (10.0)	80	0.73 (0.29, 1.86)	0.514	
	BOOST II UK	34 (16.3)	208	55 (25.8)	213	0.64 (0.44, 0.93)	0.020	
	BOOST II AUS	25 (10.3)	242	24 (9.4)	254	1.09 (0.64, 1.86)	0.745	
	NeOProM	**120 (11.4)**	**1050**	**182 (16.7)**	**1089**	**0.67 (0.54, 0.83)**	**<.001**	
Female	SUPPORT	16 (6.8)	235	38 (16.3)	233	0.43 (0.24, 0.75)	0.003	
	COT	30 (13.1)	229	26 (10.7)	242	1.16 (0.72, 1.88)	0.542	
	BOOST NZ	7 (9.2)	76	5 (7.1)	70	1.29 (0.43, 3.84)	0.651	
	BOOST II UK	35 (18.9)	185	33 (17.6)	188	1.11 (0.73, 1.66)	0.631	
	BOOST II AUS	12 (4.9)	245	24 (9.9)	243	0.52 (0.26, 1.03)	0.061	
	NeOProM	**100 (10.3)**	**970**	**126 (12.9)**	**976**	**0.82 (0.65, 1.05)**	**0.115**	
Singleton	SUPPORT	24 (6.6)	361	65 (17.0)	382	0.39 (0.25, 0.61)	<.001	0.346
	COT	48 (14.4)	334	42 (11.8)	355	1.21 (0.83, 1.79)	0.324	
	BOOST NZ	12 (10.3)	116	8 (7.2)	111	1.44 (0.61, 3.38)	0.408	
	BOOST II UK	43 (15.5)	277	60 (20.5)	293	0.76 (0.53, 1.08)	0.127	
	BOOST II AUS	29 (7.9)	366	36 (9.5)	380	0.84 (0.52, 1.33)	0.454	
	NeOProM	**156 (10.7)**	**1454**	**211 (13.9)**	**1521**	**0.78 (0.64, 0.94)**	**0.010**	
Multiple	SUPPORT	12 (9.9)	121	28 (21.2)	132	0.47 (0.23, 0.94)	0.033	
	COT	16 (9.6)	166	24 (16.2)	148	0.51 (0.31, 0.85)	0.009	
	BOOST NZ	2 (4.8)	42	5 (12.8)	39	0.41 (0.10, 1.64)	0.207	
	BOOST II UK	26 (22.4)	116	28 (25.9)	108	0.90 (0.58, 1.39)	0.639	
	BOOST II AUS	8 (6.6)	121	12 (10.3)	117	0.65 (0.27, 1.58)	0.342	
	NeOProM	**64 (11.3)**	**566**	**97 (17.8)**	**544**	**0.67 (0.51, 0.87)**	**0.003**	
start<6 hrs	SUPPORT	35 (7.4)	473	91 (18.0)	505	0.41 (0.28, 0.60)	<.001	<.001
	COT	3 (12.5)	24	2 (8.7)	23	1.45 (0.27, 7.72)	0.665	
	BOOST NZ	3 (11.5)	26	2 (7.4)	27	1.00 (0.99, 1.01)	0.545	
	BOOST II UK		.		.		.	
	BOOST II AUS	1 (2.0)	49	6 (10.7)	56	0.19 (0.02, 1.53)	0.119	
	NeOProM	**42 (7.3)**	**572**	**101 (16.5)**	**611**	**0.44 (0.31, 0.62)**	**<.001**	
>=6 hrs	SUPPORT	0	4	0	4		***	
	COT	61 (12.8)	476	64 (13.3)	480	0.88 (0.65, 1.20)	0.417	
	BOOST NZ	11 (8.3)	132	11 (8.9)	123	0.88 (0.41, 1.88)	0.738	

eTable 27. Treated retinopathy of prematurity (ROP), by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	BOOST II UK		.		.		.	
	BOOST II AUS	36 (8.3)	436	42 (9.5)	441	0.87 (0.57, 1.34)	0.529	
	NeOProM	**108 (10.3)**	**1048**	**117 (11.2)**	**1048**	**0.93 (0.72, 1.18)**	**0.531**	
Original	SUPPORT	36 (7.5)	482	93 (18.1)	514	0.41 (0.28, 0.60)	<.001	0.339
software	COT	33 (14.0)	235	28 (12.2)	229	1.07 (0.70, 1.65)	0.754	
	BOOST NZ	14 (8.9)	158	13 (8.7)	150	0.88 (0.45, 1.73)	0.715	
	BOOST II UK	19 (19.8)	96	28 (31.5)	89	0.63 (0.38, 1.06)	0.083	
	BOOST II AUS	27 (8.9)	304	26 (8.8)	297	1.02 (0.61, 1.71)	0.941	
	NeOProM	**129 (10.1)**	**1275**	**188 (14.7)**	**1279**	**0.69 (0.56, 0.85)**	**<.001**	
Revised	SUPPORT		.		.		.	
software	COT	26 (11.1)	235	30 (12.9)	232	0.84 (0.52, 1.34)	0.453	
	BOOST NZ		.		.		.	
	BOOST II UK	50 (16.8)	297	60 (19.2)	312	0.88 (0.63, 1.23)	0.465	
	BOOST II AUS	10 (5.5)	183	22 (11.0)	200	0.52 (0.26, 1.04)	0.066	
	NeOProM	**86 (12.0)**	**715**	**112 (15.1)**	**744**	**0.81 (0.63, 1.04)**	**0.092**	
SGA:	SUPPORT	33 (7.1)	465	79 (16.6)	475	0.42 (0.28, 0.62)	<.001	0.778
Trialist	COT	58 (12.7)	458	56 (12.1)	464	0.96 (0.70, 1.32)	0.823	
defined -	BOOST II NZ	11 (7.8)	141	11 (7.9)	139	0.96 (0.46, 2.00)	0.912	
No	BOOST II UK	57 (17.3)	330	75 (22.3)	337	0.78 (0.58, 1.07)	0.121	
	BOOST II AUS	28 (6.7)	421	41 (9.6)	429	0.69 (0.44, 1.10)	0.121	
	NeOProM	**187 (10.3)**	**1815**	**262 (14.2)**	**1844**	**0.73 (0.61, 0.86)**	**<.001**	
Yes	SUPPORT	3 (17.6)	17	14 (35.9)	39	0.48 (0.16, 1.46)	0.198	
	COT	6 (14.3)	42	10 (25.6)	39	0.56 (0.22, 1.39)	0.574	
	BOOST II NZ	3 (17.6)	17	2 (18.2)	11	0.94 (0.18, 4.78)	0.940	
	BOOST II UK	11 (17.7)	62	12 (19.0)	63	0.96 (0.46, 2.01)	0.923	
	BOOST II AUS	9 (13.6)	66	7 (10.3)	68	1.32 (0.53, 3.33)	0.551	
	NeOProM	**32 (15.7)**	**204**	**45 (20.5)**	**220**	**0.81 (0.53, 1.24)**	**0.423**	
SGA:	SUPPORT	28 (6.7)	421	68 (15.7)	433	0.42 (0.27, 0.65)	<.001	0.609
NeOProM	COT	58 (12.7)	458	56 (12.1)	464	0.96 (0.70, 1.32)	0.823	
defined -	BOOST II NZ	11 (7.8)	141	11 (7.9)	139	0.96 (0.46, 2.00)	0.912	
No	BOOST II UK	59 (17.1)	345	76 (21.3)	356	0.81 (0.60, 1.10)	0.178	
	BOOST II AUS	28 (6.7)	421	41 (9.6)	429	0.69 (0.44, 1.10)	0.121	
	NeOProM	**184 (10.3)**	**1786**	**252 (13.8)**	**1821**	**0.75 (0.63, 0.89)**	**0.001**	
Yes	SUPPORT	8 (13.1)	61	25 (30.9)	81	0.43 (0.21, 0.88)	0.021	
	COT	6 (14.3)	42	10 (25.6)	39	0.56 (0.22, 1.39)	0.574	
	BOOST II NZ	3 (17.6)	17	2 (18.2)	11	0.94 (0.18, 4.78)	0.940	
	BOOST II UK	10 (20.8)	48	12 (26.7)	45	0.80 (0.39, 1.66)	0.553	
	BOOST II AUS	9 (13.6)	66	7 (10.3)	68	1.32 (0.53, 3.33)	0.551	
	NeOProM	**36 (15.4)**	**234**	**56 (23.0)**	**244**	**0.70 (0.50, 0.98)**	**0.036**	

* Analysis adjusted for trials and multiple births

Abbreviations/definitions

CI: confidence interval; RR: relative risk; GA: gestational age; SUPPORT: Surfactant Positive Airway Pressure and Pulse Oximetry Trial; COT: Canadian Oxygen Trial; BOOST: Benefits of Oxygen Saturation Targeting; NZ: New Zealand; UK: United Kingdom; AUS: Australia; NeOProM: Neonatal Oxygenation Prospective Meta-analysis; inborn: born inside the treating center; outborn: born outside the treating center (e.g. transferred from another hospital; vaginal: mode of delivery through the vagina; Caesarean: mode of delivery via surgical procedure; ANS: antenatal corticosteroids; singleton: child born as a single birth; multiple: more than one child per birth; start<6 hrs: intervention commenced less than 6 hours after birth; start>=6 hrs: intervention commenced greater than or equal to 6 hours after birth; original software: original oximeter software; revised software: revised oximeter software; SGA: small for gestational age; SGA NeOProM defined: small for gestational age as per definition used by NeOProM collaboration, i.e. less than 10th percentile using charts from Kramer et al.[1]

The subgroup analysis by oximeter software type (original vs revised) excludes n=74 infants in COT who were exposed to both the original and revised software.

Empty cells (.) indicate data not collected or not applicable in this trial.

*** Low / no event rate(s) makes parameter not estimable.

eTable 28. Positive airway pressure with endotracheal tube (ETT) at 36 weeks' postmenstrual age (PMA), by subgroups

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
GA<26 wks	SUPPORT	28 (15.6)	180	28 (13.5)	208	1.19 (0.72, 1.95)	0.497	0.481
	COT	48 (18.5)	260	58 (23.1)	251	0.79 (0.57, 1.09)	0.155	
	BOOST NZ	2 (3.5)	57	2 (3.3)	61	1.07 (0.18, 6.40)	0.937	
	BOOST II UK	7 (5.2)	134	5 (3.3)	150	1.57 (0.51, 4.85)	0.434	
	BOOST II AUS	6 (3.4)	178	8 (4.2)	191	0.81 (0.29, 2.29)	0.690	
	NeOProM	**91 (11.2)**	**809**	**101 (11.7)**	**861**	**0.92 (0.71, 1.19)**	**0.514**	
GA>=26 wks	SUPPORT	19 (7.0)	271	16 (5.7)	282	1.24 (0.65, 2.36)	0.513	
	COT	49 (14.4)	341	41 (11.8)	346	1.22 (0.83, 1.79)	0.319	
	BOOST NZ	1 (1.0)	96	2 (2.3)	87	0.46 (0.04, 4.92)	0.518	
	BOOST II UK	5 (2.1)	235	7 (2.9)	243	0.74 (0.24, 2.29)	0.606	
	BOOST II AUS	3 (1.0)	299	8 (2.6)	303	0.60 (0.30, 1.21)	0.153	
	NeOProM	**77 (6.2)**	**1242**	**74 (5.9)**	**1261**	**1.05 (0.78, 1.42)**	**0.733**	
Inborn	SUPPORT	47 (10.4)	451	44 (9.0)	490	1.16 (0.78, 1.73)	0.455	0.491
	COT	92 (16.4)	561	89 (16.5)	541	0.98 (0.76, 1.28)	0.909	
	BOOST NZ	3 (2.1)	143	4 (2.9)	138	0.73 (0.17, 3.09)	0.670	
	BOOST II UK	11 (3.4)	325	11 (3.2)	347	1.08 (0.47, 2.45)	0.863	
	BOOST II AUS	9 (2.0)	442	16 (3.4)	466	0.57 (0.27, 1.23)	0.154	
	NeOProM	**162 (8.4)**	**1922**	**164 (8.3)**	**1982**	**0.99 (0.81, 1.21)**	**0.904**	
Outborn	SUPPORT		.		.		.	
	COT	5 (12.5)	40	10 (17.9)	56	0.70 (0.26, 1.89)	0.487	
	BOOST NZ	0	10	0	10		***	
	BOOST II UK	1 (2.3)	44	1 (2.2)	46	1.04 (0.07, 15.8)	0.975	
	BOOST II AUS	0	35	0	28		***	
	NeOProM	**6 (4.7)**	**129**	**11 (7.9)**	**140**	**0.73 (0.29, 1.87)**	**0.521**	
Vaginal	SUPPORT	15 (10.6)	142	9 (5.8)	155	1.82 (0.82, 4.03)	0.141	0.008
	COT	40 (18.0)	222	31 (12.8)	242	1.41 (0.93, 2.14)	0.107	
	BOOST NZ	0	62	1 (1.5)	65		***	
	BOOST II UK	9 (4.2)	212	6 (2.6)	230	1.65 (0.59, 4.56)	0.337	
	BOOST II AUS	7 (3.1)	223	8 (3.7)	219	0.45 (0.09, 2.15)	0.318	
	NeOProM	**71 (8.2)**	**861**	**55 (6.0)**	**911**	**1.36 (0.99, 1.88)**	**0.061**	
Caesarean	SUPPORT	32 (10.4)	309	35 (10.4)	335	0.99 (0.63, 1.57)	0.973	
	COT	57 (15.2)	376	68 (19.2)	354	0.78 (0.57, 1.07)	0.125	
	BOOST NZ	3 (3.3)	91	3 (3.6)	83	0.92 (0.20, 4.16)	0.915	
	BOOST II UK	3 (1.9)	157	6 (3.7)	163	0.52 (0.13, 2.02)	0.341	
	BOOST II AUS	2 (0.8)	253	8 (2.9)	272	0.27 (0.06, 1.25)	0.094	
	NeOProM	**97 (8.2)**	**1186**	**120 (9.9)**	**1207**	**0.80 (0.63, 1.03)**	**0.080**	
ANS - No	SUPPORT	4 (21.1)	19	0	24		***	0.234
	COT	10 (14.3)	70	18 (29.5)	61	0.47 (0.23, 0.97)	0.040	
	BOOST NZ	0	16	0	13		***	

eTable 28. Positive airway pressure with endotracheal tube (ETT) at 36 weeks' postmenstrual age (PMA), by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	BOOST II UK	1 (3.7)	27	1 (3.4)	29	1.07 (0.07, 16.1)	0.961	
	BOOST II AUS	1 (1.9)	52	2 (6.5)	31	0.30 (0.03, 3.07)	0.310	
	NeOProM	**16 (8.7)**	**184**	**21 (13.3)**	**158**	**0.65 (0.39, 1.23)**	**0.212**	
ANS - Yes	SUPPORT	43 (10.0)	432	44 (9.4)	466	1.06 (0.70, 1.58)	0.793	
	COT	87 (16.4)	529	81 (15.2)	534	1.07 (0.82, 1.40)	0.626	
	BOOST NZ	3 (2.2)	137	4 (3.0)	135	0.75 (0.18, 3.16)	0.692	
	BOOST II UK	11 (3.2)	340	11 (3.0)	362	1.07 (0.47, 2.44)	0.869	
	BOOST II AUS	7 (1.7)	423	14 (3.1)	458	0.51 (0.22, 1.22)	0.130	
	NeOProM	**151 (8.1)**	**1861**	**154 (7.9)**	**1955**	**1.01 (0.82, 1.24)**	**0.949**	
Male	SUPPORT	28 (11.8)	237	28 (10.1)	277	1.20 (0.72, 1.98)	0.484	0.055
	COT	65 (19.8)	328	53 (16.3)	325	1.21 (0.87, 1.67)	0.261	
	BOOST NZ	2 (2.6)	78	2 (2.5)	80	1.04 (0.15, 7.17)	0.967	
	BOOST II UK	5 (2.6)	193	4 (1.9)	211	1.37 (0.37, 5.05)	0.634	
	BOOST II AUS	5 (2.1)	235	8 (3.2)	252	0.67 (0.22, 2.02)	0.476	
	NeOProM	**105 (9.8)**	**1071**	**95 (8.3)**	**1145**	**1.16 (0.89, 1.50)**	**0.273**	
Female	SUPPORT	19 (8.9)	214	16 (7.5)	213	1.19 (0.63, 2.25)	0.594	
	COT	32 (11.7)	273	46 (16.9)	272	0.69 (0.46, 1.04)	0.073	
	BOOST NZ	1 (1.3)	75	2 (2.9)	68	0.41 (0.05, 3.56)	0.418	
	BOOST II UK	7 (4.0)	176	8 (4.4)	182	0.90 (0.34, 2.44)	0.842	
	BOOST II AUS	4 (1.7)	242	8 (3.3)	242	0.50 (0.15, 1.64)	0.251	
	NeOProM	**63 (6.4)**	**980**	**80 (8.2)**	**977**	**0.78 (0.57, 1.06)**	**0.118**	
Singleton	SUPPORT	38 (11.1)	341	35 (9.7)	361	1.15 (0.74, 1.78)	0.530	0.071
	COT	70 (17.7)	396	66 (15.9)	416	1.11 (0.82, 1.51)	0.490	
	BOOST NZ	2 (1.8)	112	2 (1.8)	110	0.98 (0.14, 6.85)	0.985	
	BOOST II UK	9 (3.5)	260	8 (2.8)	285	1.23 (0.48, 3.15)	0.661	
	BOOST II AUS	8 (2.2)	358	12 (3.2)	377	0.70 (0.29, 1.70)	0.432	
	NeOProM	**127 (8.7)**	**1467**	**123 (7.9)**	**1549**	**1.09 (0.87, 1.38)**	**0.453**	
Multiple	SUPPORT	9 (8.2)	110	9 (7.0)	129	1.20 (0.46, 3.13)	0.706	
	COT	27 (13.2)	205	33 (18.2)	181	0.71 (0.46, 1.10)	0.122	
	BOOST NZ	1 (2.4)	41	2 (5.3)	38	0.46 (0.04, 4.82)	0.520	
	BOOST II UK	3 (2.8)	109	4 (3.7)	108	0.75 (0.17, 3.32)	0.706	
	BOOST II AUS	1 (0.8)	119	4 (3.4)	117	0.26 (0.03, 2.10)	0.204	
	NeOProM	**41 (7.0)**	**584**	**52 (9.1)**	**573**	**0.72 (0.50, 1.04)**	**0.081**	
start<6 hrs	SUPPORT	44 (9.9)	443	42 (8.7)	482	1.14 (0.76, 1.72)	0.524	0.754
	COT	4 (14.8)	27	7 (26.9)	26	0.60 (0.21, 1.68)	0.330	
	BOOST NZ	0	25	1 (3.7)	27		***	
	BOOST II UK		.		.		.	
	BOOST II AUS	1 (2.1)	48	2 (3.6)	55	0.61 (0.06, 5.84)	0.665	
	NeOProM	**49 (9.0)**	**543**	**52 (8.8)**	**590**	**1.01 (0.69, 1.46)**	**0.975**	
>=6 hrs	SUPPORT	2 (50.0)	4	1 (33.3)	3	1.50 (0.23, 9.80)	0.672	

eTable 28. Positive airway pressure with endotracheal tube (ETT) at 36 weeks' postmenstrual age (PMA), by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	COT	93 (16.2)	574	92 (16.1)	571	1.00 (0.77, 1.30)	0.989	
	BOOST NZ	3 (2.3)	128	3 (2.5)	121	0.96 (0.21, 4.37)	0.962	
	BOOST II UK		.		.		.	
	BOOST II AUS	8 (1.9)	427	14 (3.2)	439	0.59 (0.27, 1.28)	0.181	
	NeOProM	**106 (9.4)**	**1133**	**110 (9.7)**	**1134**	**0.95 (0.74, 1.21)**	**0.671**	
Original	SUPPORT	47 (10.4)	451	44 (9.0)	490	1.16 (0.78, 1.73)	0.455	0.166
software	COT	53 (18.5)	286	45 (16.2)	278	1.09 (0.76, 1.56)	0.634	
	BOOST NZ	3 (2.0)	153	4 (2.7)	148	0.73 (0.17, 3.11)	0.673	
	BOOST II UK	4 (4.2)	95	1 (1.1)	88	3.69 (0.43, 31.8)	0.235	
	BOOST II AUS	7 (2.4)	296	8 (2.7)	296	0.87 (0.32, 2.38)	0.792	
	NeOProM	**114 (8.9)**	**1281**	**102 (7.8)**	**1300**	**1.13 (0.88, 1.45)**	**0.353**	
Revised	SUPPORT		.		.		.	
software	COT	41 (14.5)	283	43 (15.5)	277	0.93 (0.63, 1.37)	0.727	
	BOOST NZ		.		.		.	
	BOOST II UK	8 (2.9)	274	11 (3.6)	305	0.82 (0.33, 2.00)	0.657	
	BOOST II AUS	2 (1.1)	181	8 (4.0)	198	0.36 (0.01, 14.2)	0.587	
	NeOProM	**51 (6.9)**	**738**	**62 (7.9)**	**780**	**0.84 (0.60, 1.17)**	**0.304**	
SGA:	SUPPORT	42 (9.8)	429	35 (7.8)	449	1.25 (0.81, 1.93)	0.308	0.021
Trialist	COT	86 (15.7)	547	81 (14.8)	546	1.05 (0.80, 1.38)	0.724	
defined -	BOOST II NZ	2 (1.5)	136	2 (1.5)	137	1.00 (0.15, 6.56)	0.997	
No	BOOST II UK	10 (3.2)	310	10 (3.0)	332	1.08 (0.45, 2.55)	0.869	
	BOOST II AUS	9 (2.2)	416	11 (2.6)	427	0.75 (0.31, 1.77)	0.505	
	NeOProM	**149 (8.1)**	**1838**	**139 (7.4)**	**1891**	**1.08 (0.87, 1.34)**	**0.491**	
Yes	SUPPORT	5 (22.7)	22	9 (22.0)	41	1.02 (0.39, 2.68)	0.961	
	COT	11 (20.4)	54	18 (35.3)	51	0.44 (0.14, 1.35)	0.152	
	BOOST II NZ	1 (5.9)	17	2 (18.2)	11	0.31 (0.03, 3.07)	0.319	
	BOOST II UK	2 (3.4)	58	2 (3.3)	60	1.09 (0.35, 3.43)	0.880	
	BOOST II AUS	0	61	5 (7.5)	67		***	
	NeOProM	**19 (9.0)**	**212**	**36 (15.7)**	**230**	**0.60 (0.37, 0.97)**	**0.042**	
SGA:	SUPPORT	36 (9.3)	389	28 (7.0)	400	1.32 (0.82, 2.13)	0.257	0.029
NeOProM	COT	86 (15.7)	547	81 (14.8)	546	1.05 (0.80, 1.38)	0.724	
defined -	BOOST II NZ	2 (1.5)	136	2 (1.5)	137	1.00 (0.15, 6.56)	0.997	
No	BOOST II UK	10 (3.1)	326	9 (2.6)	349	1.20 (0.49, 2.90)	0.694	
	BOOST II AUS	9 (2.2)	416	11 (2.6)	427	0.75 (0.31, 1.77)	0.505	
	NeOProM	**143 (7.9)**	**1814**	**131 (7.0)**	**1859**	**1.09 (0.87, 1.36)**	**0.443**	
Yes	SUPPORT	11 (17.7)	62	16 (17.8)	90	1.00 (0.50, 2.00)	0.994	
	COT	11 (20.4)	54	18 (35.3)	51	0.44 (0.14, 1.35)	0.152	
	BOOST II NZ	1 (5.9)	17	2 (18.2)	11	0.31 (0.03, 3.07)	0.319	
	BOOST II UK	2 (4.7)	43	3 (6.8)	44	0.75 (0.17, 3.30)	0.705	
	BOOST II AUS	0	61	5 (7.5)	67		***	

eTable 28. Positive airway pressure with endotracheal tube (ETT) at 36 weeks' postmenstrual age . (PMA), by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	Trial	n (%)	N	n (%)	N	Adjusted RR	p-value	interaction p-value
	NeOProM	25 (10.5)	237	44 (16.7)	263	0.60 (0.38, 0.96)	0.034	

* Analysis adjusted for trials and multiple births

Abbreviations/definitions

CI: confidence interval; RR: relative risk; GA: gestational age; SUPPORT: Surfactant Positive Airway Pressure and Pulse Oximetry Trial; COT: Canadian Oxygen Trial; BOOST: Benefits of Oxygen Saturation Targeting; NZ: New Zealand; UK: United Kingdom; AUS: Australia; NeOProM: Neonatal Oxygenation Prospective Meta-analysis; inborn: born inside the treating center; outborn: born outside the treating center (e.g. transferred from another hospital; vaginal: mode of delivery through the vagina; Caesarean: mode of delivery via surgical procedure; ANS: antenatal corticosteroids; singleton: child born as a single birth; multiple: more than one child per birth; start<6 hrs: intervention commenced less than 6 hours after birth; start>=6 hrs: intervention commenced greater than or equal to 6 hours after birth; original software: original oximeter software; revised software: revised oximeter software; SGA: small for gestational age; SGA NeOProM defined: small for gestational age as per definition used by NeOProM collaboration, i.e. less than 10th percentile using charts from Kramer et al.[1]

The subgroup analysis by oximeter software type (original vs revised) excludes n=74 infants in COT who were exposed to both the original and revised software.

Empty cells (.) indicate data not collected or not applicable in this trial.

*** Low / no event rate(s) makes parameter not estimable.

eTable 29. Positive airway pressure without endotracheal tube (ETT) at 36 weeks' postmenstrual age (PMA), by subgroups

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
GA<26 wks	SUPPORT	55 (30.6)	180	80 (38.5)	208	0.81 (0.61, 1.08)	0.149	0.485
	COT	82 (31.5)	260	92 (36.7)	251	0.82 (0.66, 1.03)	0.085	
	BOOST NZ	19 (33.3)	57	27 (44.3)	61	0.79 (0.51, 1.22)	0.280	
	BOOST II UK	30 (22.4)	134	38 (25.3)	150	0.95 (0.61, 1.47)	0.817	
	BOOST II AUS	50 (28.1)	178	51 (26.7)	191	1.04 (0.76, 1.43)	0.786	
	NeOProM	**236 (29.2)**	**809**	**288 (33.4)**	**861**	**0.87 (0.75, 0.99)**	**0.041**	
GA>=26 wks	SUPPORT	56 (20.7)	271	86 (30.5)	282	0.70 (0.52, 0.95)	0.020	
	COT	95 (27.9)	341	86 (24.9)	346	1.11 (0.88, 1.39)	0.394	
	BOOST NZ	19 (19.8)	96	19 (21.8)	87	0.89 (0.51, 1.55)	0.675	
	BOOST II UK	36 (15.3)	235	38 (15.6)	243	0.87 (0.57, 1.32)	0.508	
	BOOST II AUS	48 (16.1)	299	47 (15.5)	303	0.99 (0.69, 1.42)	0.955	
	NeOProM	**254 (20.5)**	**1242**	**276 (21.9)**	**1261**	**0.93 (0.80, 1.07)**	**0.322**	
Inborn	SUPPORT	111 (24.6)	451	166 (33.9)	490	0.75 (0.61, 0.92)	0.006	0.994
	COT	163 (29.1)	561	160 (29.6)	541	0.94 (0.80, 1.11)	0.467	
	BOOST NZ	36 (25.2)	143	45 (32.6)	138	0.79 (0.55, 1.13)	0.202	
	BOOST II UK	58 (17.8)	325	68 (19.6)	347	0.93 (0.68, 1.28)	0.663	
	BOOST II AUS	95 (21.5)	442	89 (19.1)	466	1.09 (0.85, 1.40)	0.481	
	NeOProM	**463 (24.1)**	**1922**	**528 (26.6)**	**1982**	**0.89 (0.81, 0.99)**	**0.032**	
Outborn	SUPPORT		.		.		.	
	COT	14 (35.0)	40	18 (32.1)	56	1.02 (0.56, 1.87)	0.938	
	BOOST NZ	2 (20.0)	10	1 (10.0)	10	1.93 (0.22, 16.8)	0.551	
	BOOST II UK	8 (18.2)	44	8 (17.4)	46	1.17 (0.51, 2.68)	0.709	
	BOOST II AUS	3 (8.6)	35	9 (32.1)	28	0.44 (0.08, 2.42)	0.344	
	NeOProM	**27 (20.9)**	**129**	**36 (25.7)**	**140**	**0.87 (0.56, 1.35)**	**0.533**	
Vaginal	SUPPORT	35 (24.6)	142	46 (29.7)	155	0.84 (0.57, 1.22)	0.356	0.171
	COT	64 (28.8)	222	58 (24.0)	242	1.19 (0.88, 1.63)	0.262	
	BOOST NZ	17 (27.4)	62	17 (26.2)	65	1.88 (0.65, 5.39)	0.243	
	BOOST II UK	33 (15.6)	212	47 (20.4)	230	0.84 (0.55, 1.26)	0.397	
	BOOST II AUS	38 (17.0)	223	39 (17.8)	219	0.96 (0.64, 1.42)	0.823	
	NeOProM	**187 (21.7)**	**861**	**207 (22.7)**	**911**	**0.97 (0.82, 1.15)**	**0.748**	
Caesarean	SUPPORT	76 (24.6)	309	120 (35.8)	335	0.70 (0.55, 0.90)	0.005	
	COT	112 (29.8)	376	119 (33.6)	354	0.87 (0.72, 1.05)	0.139	
	BOOST NZ	21 (23.1)	91	29 (34.9)	83	0.66 (0.42, 1.05)	0.077	
	BOOST II UK	33 (21.0)	157	29 (17.8)	163	1.06 (0.66, 1.69)	0.823	
	BOOST II AUS	60 (23.7)	253	59 (21.7)	272	1.04 (0.77, 1.39)	0.816	
	NeOProM	**302 (25.5)**	**1186**	**356 (29.5)**	**1207**	**0.84 (0.75, 0.95)**	**0.007**	
ANS – No	SUPPORT	2 (10.5)	19	9 (37.5)	24	0.32 (0.07, 1.34)	0.118	0.172
	COT	23 (32.9)	70	26 (42.6)	61	0.78 (0.50, 1.21)	0.260	
	BOOST NZ	4 (25.0)	16	4 (30.8)	13	0.82 (0.30, 2.25)	0.701	

eTable 29. Positive airway pressure without endotracheal tube (ETT) at 36 weeks' postmenstrual age (PMA), by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	BOOST II UK	6 (22.2)	27	3 (10.3)	29	2.15 (0.60, 7.75)	0.141	
	BOOST II AUS	4 (7.7)	52	7 (22.6)	31	0.34 (0.11, 1.06)	0.062	
	NeOProM	**39 (21.2)**	**184**	**49 (31.0)**	**158**	**0.73 (0.51, 1.04)**	**0.084**	
ANS - Yes	SUPPORT	109 (25.2)	432	157 (33.7)	466	0.77 (0.62, 0.95)	0.014	
	COT	153 (28.9)	529	152 (28.5)	534	0.97 (0.82, 1.16)	0.765	
	BOOST NZ	34 (24.8)	137	42 (31.1)	135	0.81 (0.56, 1.18)	0.279	
	BOOST II UK	59 (17.4)	340	71 (19.6)	362	0.90 (0.66, 1.23)	0.520	
	BOOST II AUS	94 (22.2)	423	89 (19.4)	458	1.11 (0.86, 1.41)	0.424	
	NeOProM	**449 (24.1)**	**1861**	**511 (26.1)**	**1955**	**0.91 (0.82, 1.02)**	**0.093**	
Male	SUPPORT	67 (28.3)	237	92 (33.2)	277	0.87 (0.66, 1.13)	0.296	0.369
	COT	96 (29.3)	328	92 (28.3)	325	1.02 (0.80, 1.29)	0.882	
	BOOST NZ	18 (23.1)	78	27 (33.8)	80	0.73 (0.46, 1.17)	0.196	
	BOOST II UK	39 (20.2)	193	48 (22.7)	211	0.88 (0.61, 1.28)	0.510	
	BOOST II AUS	50 (21.3)	235	52 (20.6)	252	1.01 (0.72, 1.43)	0.943	
	NeOProM	**270 (25.2)**	**1071**	**311 (27.2)**	**1145**	**0.93 (0.81, 1.06)**	**0.282**	
Female	SUPPORT	44 (20.6)	214	74 (34.7)	213	0.60 (0.43, 0.83)	0.002	
	COT	81 (29.7)	273	86 (31.6)	272	0.95 (0.77, 1.17)	0.613	
	BOOST NZ	20 (26.7)	75	19 (27.9)	68	0.26 (0.04, 1.67)	0.158	
	BOOST II UK	27 (15.3)	176	28 (15.4)	182	0.96 (0.60, 1.52)	0.855	
	BOOST II AUS	48 (19.8)	242	46 (19.0)	242	1.01 (0.71, 1.43)	0.974	
	NeOProM	**220 (22.4)**	**980**	**253 (25.9)**	**977**	**0.85 (0.74, 0.99)**	**0.032**	
Singleton	SUPPORT	93 (27.3)	341	117 (32.4)	361	0.84 (0.67, 1.06)	0.139	0.273
	COT	119 (30.1)	396	125 (30.0)	416	1.00 (0.81, 1.23)	0.999	
	BOOST NZ	26 (23.2)	112	35 (31.8)	110	0.73 (0.47, 1.13)	0.154	
	BOOST II UK	42 (16.2)	260	47 (16.5)	285	0.98 (0.67, 1.43)	0.915	
	BOOST II AUS	73 (20.4)	358	75 (19.9)	377	1.02 (0.77, 1.37)	0.867	
	NeOProM	**353 (24.1)**	**1467**	**399 (25.8)**	**1549**	**0.93 (0.82, 1.05)**	**0.239**	
Multiple	SUPPORT	18 (16.4)	110	49 (38.0)	129	0.45 (0.26, 0.76)	0.003	
	COT	58 (28.3)	205	53 (29.3)	181	0.90 (0.70, 1.17)	0.433	
	BOOST NZ	12 (29.3)	41	11 (28.9)	38	1.01 (0.56, 1.80)	0.983	
	BOOST II UK	24 (22.0)	109	29 (26.9)	108	0.84 (0.55, 1.28)	0.413	
	BOOST II AUS	25 (21.0)	119	23 (19.7)	117	0.97 (0.63, 1.47)	0.876	
	NeOProM	**137 (23.5)**	**584**	**165 (28.8)**	**573**	**0.83 (0.70, 0.98)**	**0.029**	
start<6 hrs	SUPPORT	110 (24.8)	443	166 (34.4)	482	0.74 (0.60, 0.91)	0.005	0.115
	COT	3 (11.1)	27	11 (42.3)	26	0.31 (0.11, 0.88)	0.029	
	BOOST NZ	12 (48.0)	25	7 (25.9)	27	1.67 (0.73, 3.82)	0.228	
	BOOST II UK		.		.		.	
	BOOST II AUS	16 (33.3)	48	14 (25.5)	55	1.29 (0.75, 2.23)	0.360	
	NeOProM	**141 (26.0)**	**543**	**198 (33.6)**	**590**	**0.80 (0.66, 0.96)**	**0.016**	
>=6 hrs	SUPPORT	0	4	0	3		***	

eTable 29. Positive airway pressure without endotracheal tube (ETT) at 36 weeks' postmenstrual age (PMA), by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	COT	174 (30.3)	574	167 (29.2)	571	1.00 (0.85, 1.18)	0.972	
	BOOST NZ	26 (20.3)	128	39 (32.2)	121	0.65 (0.43, 0.98)	0.038	
	BOOST II UK		.		.		.	
	BOOST II AUS	81 (19.0)	427	84 (19.1)	439	0.97 (0.74, 1.26)	0.822	
	NeOProM	**281 (24.8)**	**1133**	**290 (25.6)**	**1134**	**0.95 (0.84, 1.11)**	**0.652**	
Original	SUPPORT	111 (24.6)	451	166 (33.9)	490	0.75 (0.61, 0.92)	0.006	0.317
software	COT	86 (30.1)	286	74 (26.6)	278	1.07 (0.83, 1.37)	0.612	
	BOOST NZ	38 (24.8)	153	46 (31.1)	148	0.81 (0.57, 1.16)	0.252	
	BOOST II UK	16 (16.8)	95	16 (18.2)	88	1.00 (0.53, 1.86)	0.992	
	BOOST II AUS	51 (17.2)	296	54 (18.2)	296	0.93 (0.66, 1.31)	0.695	
	NeOProM	**302 (23.6)**	**1281**	**356 (27.4)**	**1300**	**0.87 (0.77, 0.99)**	**0.037**	
Revised	SUPPORT		.		.		.	
software	COT	82 (29.0)	283	85 (30.7)	277	0.94 (0.75, 1.19)	0.625	
	BOOST NZ		.		.		.	
	BOOST II UK	50 (18.2)	274	60 (19.7)	305	0.90 (0.64, 1.27)	0.555	
	BOOST II AUS	47 (26.0)	181	44 (22.2)	198	1.13 (0.81, 1.57)	0.482	
	NeOProM	**179 (24.3)**	**738**	**189 (24.2)**	**780**	**0.97 (0.82, 1.15)**	**0.731**	
SGA:	SUPPORT	100 (23.3)	429	148 (33.0)	449	0.73 (0.58, 0.91)	0.005	0.349
Trialist	COT	153 (28.0)	547	155 (28.4)	546	0.96 (0.80, 1.15)	0.652	
defined -	BOOST II NZ	29 (21.3)	136	38 (27.7)	137	0.79 (0.53, 1.18)	0.247	
No	BOOST II UK	48 (15.5)	310	60 (18.1)	332	0.89 (0.62, 1.26)	0.498	
	BOOST II AUS	74 (17.8)	416	69 (16.2)	427	1.07 (0.80, 1.42)	0.653	
	NeOProM	**404 (22.0)**	**1838**	**470 (24.9)**	**1891**	**0.88 (0.79, 0.99)**	**0.028**	
Yes	SUPPORT	11 (50.0)	22	18 (43.9)	41	1.14 (0.66, 1.96)	0.838	
	COT	24 (44.4)	54	23 (45.1)	51	0.99 (0.64, 1.57)	0.951	
	BOOST II NZ	9 (52.9)	17	8 (72.7)	11	0.73 (0.41, 1.29)	0.892	
	BOOST II UK	18 (31.0)	58	16 (26.7)	60	1.16 (0.66, 2.05)	0.599	
	BOOST II AUS	24 (39.3)	61	29 (43.3)	67	0.91 (0.61, 1.36)	0.650	
	NeOProM	**86 (40.6)**	**212**	**94 (40.9)**	**230**	**0.99 (0.79, 1.23)**	**0.728**	
SGA:	SUPPORT	93 (23.9)	389	130 (32.5)	400	0.76 (0.60, 0.96)	0.022	0.887
NeOProM	COT	153 (28.0)	547	155 (28.4)	546	0.96 (0.80, 1.15)	0.652	
defined -	BOOST II NZ	29 (21.3)	136	38 (27.7)	137	0.79 (0.53, 1.18)	0.247	
No	BOOST II UK	50 (15.3)	326	62 (17.8)	349	0.89 (0.63, 1.26)	0.509	
	BOOST II AUS	74 (17.8)	416	69 (16.2)	427	1.07 (0.80, 1.42)	0.653	
	NeOProM	**399 (22.0)**	**1814**	**454 (24.4)**	**1859**	**0.90 (0.80, 1.00)**	**0.058**	
Yes	SUPPORT	18 (29.0)	62	36 (40.0)	90	0.75 (0.47, 1.19)	0.226	
	COT	24 (44.4)	54	23 (45.1)	51	0.99 (0.64, 1.51)	0.951	
	BOOST II NZ	9 (52.9)	17	8 (72.7)	11	0.73 (0.41, 1.29)	0.892	
	BOOST II UK	16 (37.2)	43	14 (31.8)	44	1.17 (0.65, 2.09)	0.622	
	BOOST II AUS	24 (39.3)	61	29 (43.3)	67	0.91 (0.61, 1.36)	0.650	

eTable 29. Positive airway pressure without endotracheal tube (ETT) at 36 weeks' postmenstrual age (PMA), by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	Trial	n (%)	N	n (%)	N	Adjusted RR	p-value	interaction p-value
	NeOProM	91 (38.4)	237	110 (41.8)	263	0.89 (0.72, 1.11)	0.335	

* Analysis adjusted for trials and multiple births

Abbreviations/definitions

CI: confidence interval; RR: relative risk; GA: gestational age; SUPPORT: Surfactant Positive Airway Pressure and Pulse Oximetry Trial; COT: Canadian Oxygen Trial; BOOST: Benefits of Oxygen Saturation Targeting; NZ: New Zealand; UK: United Kingdom; AUS: Australia; NeOProM: Neonatal Oxygenation Prospective Meta-analysis; inborn: born inside the treating center; outborn: born outside the treating center (e.g. transferred from another hospital; vaginal: mode of delivery through the vagina; Caesarean: mode of delivery via surgical procedure; ANS: antenatal corticosteroids; singleton: child born as a single birth; multiple: more than one child per birth; start<6 hrs: intervention commenced less than 6 hours after birth; start>=6 hrs: intervention commenced greater than or equal to 6 hours after birth; original software: original oximeter software; revised software: revised oximeter software; SGA: small for gestational age; SGA NeOProM defined: small for gestational age as per definition used by NeOProM collaboration, i.e. less than 10th percentile using charts from Kramer et al.[1]

The subgroup analysis by oximeter software type (original vs revised) excludes n=74 infants in COT who were exposed to both the original and revised software.

Empty cells (.) indicate data not collected or not applicable in this trial.

*** Low / no event rate(s) makes parameter not estimable.

eTable 30. Supplemental oxygen[#] without positive airway pressure at 36 weeks, by subgroups

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
GA<26 wks	SUPPORT	19 (10.6)	180	29 (13.9)	208	0.74 (0.43, 1.29)	0.291	0.878
	COT	81 (48.2)	168	107 (65.6)	163	0.75 (0.62, 0.91)	0.003	
	BOOST NZ	13 (22.8)	57	20 (32.8)	61	0.69 (0.40, 1.18)	0.175	
	BOOST II UK	68 (50.7)	134	68 (45.3)	150	1.10 (0.86, 1.41)	0.448	
	BOOST II AUS	48 (27.0)	178	71 (37.2)	191	0.73 (0.54, 0.98)	0.038	
	NeOProM	**229 (31.9)**	**717**	**295 (38.2)**	**773**	**0.82 (0.72, 0.93)**	**0.002**	
GA>=26 wks	SUPPORT	31 (11.4)	271	35 (12.5)	280	0.88 (0.54, 1.41)	0.583	
	COT	75 (32.9)	228	85 (37.9)	224	0.90 (0.72, 1.12)	0.328	
	BOOST NZ	10 (10.4)	96	17 (19.5)	87	0.56 (0.28, 1.15)	0.116	
	BOOST II UK	58 (24.7)	235	79 (32.5)	243	0.74 (0.56, 0.98)	0.034	
	BOOST II AUS	56 (18.7)	299	67 (22.1)	303	0.86 (0.64, 1.15)	0.306	
	NeOProM	**230 (20.4)**	**1129**	**283 (24.9)**	**1137**	**0.81 (0.70, 0.93)**	**0.003**	
Inborn	SUPPORT	50 (11.1)	451	64 (13.1)	488	0.81 (0.57, 1.17)	0.261	0.814
	COT	146 (39.1)	373	173 (48.2)	359	0.84 (0.72, 0.98)	0.027	
	BOOST NZ	21 (14.7)	143	34 (24.6)	138	0.60 (0.37, 0.98)	0.040	
	BOOST II UK	110 (33.8)	325	129 (37.2)	347	0.88 (0.72, 1.07)	0.197	
	BOOST II AUS	96 (21.7)	442	131 (28.1)	466	0.78 (0.63, 0.97)	0.026	
	NeOProM	**423 (24.4)**	**1734**	**531 (29.5)**	**1798**	**0.82 (0.74, 0.90)**	**<.001**	
Outborn	SUPPORT		.		.		.	
	COT	10 (43.5)	23	19 (67.9)	28	0.64 (0.38, 1.09)	0.100	
	BOOST NZ	2 (20.0)	10	3 (30.0)	10	0.65 (0.16, 2.61)	0.540	
	BOOST II UK	16 (36.4)	44	18 (39.1)	46	0.93 (0.56, 1.55)	0.778	
	BOOST II AUS	8 (22.9)	35	7 (25.0)	28	1.01 (0.45, 2.27)	0.976	
	NeOProM	**36 (32.1)**	**112**	**47 (42.0)**	**112**	**0.78 (0.57, 1.08)**	**0.131**	
Vaginal	SUPPORT	10 (7.1)	141	19 (12.3)	154	0.57 (0.28, 1.19)	0.137	0.524
	COT	53 (38.7)	137	75 (51.7)	145	0.78 (0.62, 0.97)	0.027	
	BOOST NZ	8 (12.9)	62	17 (26.2)	65	0.51 (0.26, 1.00)	0.050	
	BOOST II UK	88 (41.5)	212	91 (39.6)	230	1.00 (0.80, 1.25)	0.973	
	BOOST II AUS	50 (22.4)	223	56 (25.6)	219	0.87 (0.63, 1.21)	0.403	
	NeOProM	**209 (27.0)**	**775**	**258 (31.7)**	**813**	**0.85 (0.74, 0.98)**	**0.024**	
Caesarean	SUPPORT	40 (12.9)	310	45 (13.5)	334	0.93 (0.61, 1.40)	0.714	
	COT	102 (39.5)	258	116 (48.1)	241	0.84 (0.70, 1.02)	0.077	
	BOOST NZ	15 (16.5)	91	20 (24.1)	83	0.72 (0.40, 1.30)	0.274	
	BOOST II UK	38 (24.2)	157	56 (34.4)	163	0.71 (0.50, 0.99)	0.042	
	BOOST II AUS	54 (21.3)	253	82 (30.1)	272	0.75 (0.57, 0.99)	0.043	
	NeOProM	**249 (23.3)**	**1069**	**319 (29.2)**	**1093**	**0.79 (0.69, 0.90)**	**<.001**	
ANS - No	SUPPORT	0	19	4 (16.7)	24		***	0.251
	COT	18 (47.4)	38	26 (65.0)	40	1.71 (0.59, 4.96)	0.320	
	BOOST NZ	2 (12.5)	16	4 (30.8)	13	0.42 (0.11, 1.69)	0.223	
	BOOST II UK	10 (37.0)	27	14 (48.3)	29	0.33 (0.06, 1.80)	0.199	

eTable 30. Supplemental oxygen[#] without positive airway pressure at 36 weeks, by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	BOOST II AUS	11 (21.2)	52	10 (32.3)	31	0.68 (0.32, 1.42)	0.301	
	NeOProM	**41 (27.0)**	**152**	**58 (42.3)**	**137**	**0.73 (0.54, 1.00)**	**0.047**	
ANS - Yes	SUPPORT	50 (11.6)	432	60 (12.9)	464	0.86 (0.60, 1.24)	0.424	
	COT	137 (38.4)	357	166 (47.8)	347	0.83 (0.71, 0.97)	0.018	
	BOOST NZ	21 (15.3)	137	33 (24.4)	135	0.63 (0.39, 1.03)	0.066	
	BOOST II UK	116 (34.1)	340	133 (36.7)	362	0.90 (0.74, 1.09)	0.263	
	BOOST II AUS	92 (21.7)	423	126 (27.5)	458	0.80 (0.64, 1.00)	0.049	
	NeOProM	**416 (24.6)**	**1689**	**518 (29.3)**	**1766**	**0.83 (0.75, 0.91)**	**<.001**	
Male	SUPPORT	31 (13.1)	236	37 (13.4)	277	0.95 (0.60, 1.51)	0.836	0.213
	COT	89 (42.4)	210	102 (50.5)	202	0.90 (0.74, 1.09)	0.289	
	BOOST NZ	13 (16.7)	78	22 (27.5)	80	0.61 (0.34, 1.11)	0.104	
	BOOST II UK	68 (35.2)	193	80 (37.9)	211	0.90 (0.70, 1.17)	0.434	
	BOOST II AUS	55 (23.4)	235	72 (28.6)	252	0.83 (0.62, 1.12)	0.218	
	NeOProM	**256 (26.9)**	**952**	**313 (30.6)**	**1022**	**0.86 (0.76, 0.98)**	**0.025**	
Female	SUPPORT	19 (8.8)	215	27 (12.8)	211	0.61 (0.34, 1.10)	0.102	
	COT	67 (36.0)	186	90 (48.6)	185	0.74 (0.59, 0.93)	0.010	
	BOOST NZ	10 (13.3)	75	15 (22.1)	68	0.62 (0.29, 1.29)	0.199	
	BOOST II UK	58 (33.0)	176	67 (36.8)	182	0.89 (0.68, 1.17)	0.419	
	BOOST II AUS	49 (20.2)	242	66 (27.3)	242	0.74 (0.54, 1.01)	0.056	
	NeOProM	**203 (22.7)**	**894**	**265 (29.8)**	**888**	**0.76 (0.66, 0.88)**	**<.001**	
Singleton	SUPPORT	28 (8.2)	340	47 (13.1)	360	0.63 (0.40, 0.98)	0.042	0.074
	COT	103 (39.5)	261	140 (53.0)	264	0.74 (0.62, 0.90)	0.002	
	BOOST NZ	20 (17.9)	112	30 (27.3)	110	0.65 (0.40, 1.08)	0.098	
	BOOST II UK	93 (35.8)	260	114 (40.0)	285	0.89 (0.72, 1.11)	0.311	
	BOOST II AUS	72 (20.1)	358	103 (27.3)	377	0.74 (0.57, 0.96)	0.023	
	NeOProM	**316 (23.7)**	**1331**	**434 (31.1)**	**1396**	**0.77 (0.68, 0.86)**	**<.001**	
Multiple	SUPPORT	22 (19.8)	111	17 (13.3)	128	1.52 (0.81, 2.85)	0.192	
	COT	53 (39.3)	135	52 (42.3)	123	0.98 (0.77, 1.25)	0.865	
	BOOST NZ	3 (7.3)	41	7 (18.4)	38	0.47 (0.14, 1.59)	0.222	
	BOOST II UK	33 (30.3)	109	33 (30.6)	108	0.87 (0.60, 1.28)	0.482	
	BOOST II AUS	32 (26.9)	119	35 (29.9)	117	0.91 (0.65, 1.27)	0.574	
	NeOProM	**143 (27.8)**	**515**	**144 (28.0)**	**514**	**0.94 (0.79, 1.11)**	**0.437**	
start<6 hrs	SUPPORT	50 (11.3)	443	63 (13.1)	480	0.83 (0.58, 1.19)	0.308	0.889
	COT	6 (27.3)	22	11 (57.9)	19	0.51 (0.25, 1.04)	0.063	
	BOOST NZ	5 (20.0)	25	4 (14.8)	27	1.37 (0.40, 4.68)	0.612	
	BOOST II UK		.		.		.	
	BOOST II AUS	11 (22.9)	48	17 (30.9)	55	1.81 (0.44, 7.42)	0.408	
	NeOProM	**72 (13.4)**	**538**	**95 (16.4)**	**581**	**0.78 (0.59, 1.03)**	**0.080**	
>=6 hrs	SUPPORT	0	4	1 (33.3)	3		***	
	COT	150 (40.1)	374	181 (49.2)	368	0.85 (0.73, 0.98)	0.030	
	BOOST NZ	18 (14.1)	128	33 (27.3)	121	0.52 (0.31, 0.86)	0.012	

eTable 30. Supplemental oxygen[#] without positive airway pressure at 36 weeks, by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	BOOST II UK		.		.		.	
	BOOST II AUS	93 (21.8)	427	121 (27.6)	439	0.79 (0.63, 0.99)	0.040	
	NeOProM	**261 (28.0)**	**933**	**336 (36.1)**	**931**	**0.79 (0.70, 0.90)**	**<.001**	
Original	SUPPORT	50 (11.1)	451	64 (13.1)	488	0.81 (0.57, 1.17)	0.261	0.475
software	COT	75 (40.1)	187	79 (44.6)	177	0.93 (0.74, 1.17)	0.535	
	BOOST NZ	23 (15.0)	153	37 (25.0)	148	0.60 (0.38, 0.96)	0.033	
	BOOST II UK	38 (40.0)	95	37 (42.0)	88	0.92 (0.64, 1.30)	0.624	
	BOOST II AUS	68 (23.0)	296	83 (28.0)	296	0.84 (0.65, 1.10)	0.206	
	NeOProM	**254 (21.5)**	**1182**	**300 (25.1)**	**1197**	**0.85 (0.74, 0.97)**	**0.020**	
Revised	SUPPORT		.		.		.	
software	COT	71 (38.4)	185	91 (50.6)	180	0.78 (0.63, 0.96)	0.018	
	BOOST NZ		.		.		.	
	BOOST II UK	88 (32.1)	274	110 (36.1)	305	0.87 (0.70, 1.08)	0.214	
	BOOST II AUS	36 (19.9)	181	55 (27.8)	198	0.67 (0.46, 0.95)	0.027	
	NeOProM	**195 (30.5)**	**640**	**256 (37.5)**	**683**	**0.79 (0.69, 0.91)**	**0.001**	
SGA:	SUPPORT	48 (11.2)	429	57 (12.8)	447	0.85 (0.59, 1.24)	0.404	0.005
Trialist	COT	143 (39.6)	361	168 (47.5)	354	0.86 (0.73, 1.00)	0.052	
defined -	BOOST II NZ	21 (15.4)	136	34 (24.8)	137	0.63 (0.39, 1.02)	0.062	
No	BOOST II UK	114 (36.8)	310	122 (36.7)	332	0.97 (0.80, 1.18)	0.745	
	BOOST II AUS	90 (21.6)	416	115 (26.9)	427	0.81 (0.64, 1.02)	0.071	
	NeOProM	**416 (25.2)**	**1652**	**496 (29.2)**	**1697**	**0.86 (0.77, 0.95)**	**0.003**	
Yes	SUPPORT	2 (9.1)	22	7 (17.1)	41	0.28 (0.07, 1.13)	0.074	
	COT	13 (37.1)	35	24 (72.7)	33	0.62 (0.42, 0.92)	0.019	
	BOOST II NZ	2 (11.8)	17	3 (27.3)	11	0.26 (0.07, 0.97)	0.045	
	BOOST II UK	12 (20.7)	58	24 (40.0)	60	0.53 (0.29, 0.94)	0.030	
	BOOST II AUS	14 (23.0)	61	23 (34.3)	67	0.69 (0.40, 1.19)	0.184	
	NeOProM	**43 (22.3)**	**193**	**81 (38.2)**	**212**	**0.55 (0.41, 0.75)**	**0.0001**	
SGA:	SUPPORT	42 (10.9)	387	51 (12.8)	398	0.83 (0.57, 1.23)	0.360	0.023
NeOProM	COT	143 (39.6)	361	168 (47.5)	354	0.86 (0.73, 1.00)	0.052	
defined -	BOOST II NZ	21 (15.4)	136	34 (24.8)	137	0.63 (0.39, 1.02)	0.062	
No	BOOST II UK	119 (36.5)	326	133 (38.1)	349	0.94 (0.77, 1.13)	0.496	
	BOOST II AUS	90 (21.6)	416	115 (26.9)	427	0.81 (0.64, 1.02)	0.071	
	NeOProM	**415 (25.5)**	**1626**	**501 (30.1)**	**1665**	**0.85 (0.77, 0.94)**	**0.001**	
Yes	SUPPORT	8 (12.5)	64	13 (14.4)	90	0.79 (0.33, 1.86)	0.584	
	COT	13 (37.1)	35	24 (72.7)	33	0.62 (0.42, 0.92)	0.019	
	BOOST II NZ	2 (11.8)	17	3 (27.3)	11	0.26 (0.07, 0.97)	0.045	
	BOOST II UK	7 (16.3)	43	14 (31.8)	44	0.52 (0.24, 1.15)	0.105	
	BOOST II AUS	14 (23.0)	61	23 (34.3)	67	0.69 (0.40, 1.19)	0.184	
	NeOProM	**44 (20.0)**	**220**	**77 (31.4)**	**245**	**0.60 (0.44, 0.82)**	**0.001**	

[#] SUPPORT and UK trials used a physiologic test to determine need for supplemental oxygen whilst the other trials did not.

* Analysis adjusted for trials and multiple births

Abbreviations/definitions

CI: confidence interval; RR: relative risk; GA: gestational age; SUPPORT: Surfactant Positive Airway Pressure and Pulse Oximetry Trial; COT: Canadian Oxygen Trial; BOOST: Benefits of Oxygen Saturation Targeting; NZ: New Zealand; UK: United Kingdom; AUS: Australia; NeOProM: Neonatal Oxygenation Prospective Meta-analysis; inborn: born inside the treating center; outborn: born outside the treating center (e.g. transferred from another hospital; vaginal: mode of delivery through the vagina; Caesarean: mode of delivery via surgical procedure; ANS: antenatal corticosteroids; singleton: child born as a single birth; multiple: more than one child per birth; start<6 hrs: intervention commenced less than 6 hours after birth; start>=6 hrs: intervention commenced greater than or equal to 6 hours after birth; original software: original oximeter software; revised software: revised oximeter software; SGA: small for gestational age; SGA NeOProM defined: small for gestational age as per definition used by NeOProM collaboration, i.e. less than 10th percentile using charts from Kramer et al.[1]

The subgroup analysis by oximeter software type (original vs revised) excludes n=74 infants in COT who were exposed to both the original and revised software.

Empty cells (.) indicate data not collected or not applicable in this trial.

*** Low / no event rate(s) makes parameter not estimable.

eTable 31. Discharged home on oxygen, by subgroups

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
GA<26 wks	SUPPORT	58 (30.7)	189	70 (32.9)	213	0.93 (0.70, 1.25)	0.643	0.907
	COT	49 (25.3)	194	40 (21.2)	189	1.18 (0.82, 1.71)	0.364	
	BOOST NZ	13 (18.1)	72	23 (31.9)	72	0.58 (0.32, 1.04)	0.067	
	BOOST II UK	72 (53.7)	134	68 (45.3)	150	1.19 (0.93, 1.51)	0.161	
	BOOST II AUS	48 (20.0)	240	55 (22.9)	240	0.85 (0.60, 1.21)	0.375	
	NeOProM	**240 (29.0)**	**829**	**256 (29.6)**	**864**	**1.01 (0.88, 1.17)**	**0.848**	
GA>=26 wks	SUPPORT	60 (18.1)	331	58 (17.3)	336	1.06 (0.76, 1.47)	0.738	
	COT	31 (9.9)	313	28 (8.7)	323	1.19 (0.75, 1.87)	0.464	
	BOOST NZ	21 (21.4)	98	18 (18.4)	98	1.16 (0.65, 2.05)	0.613	
	BOOST II UK	69 (29.4)	235	70 (29.5)	237	0.97 (0.74, 1.27)	0.804	
	BOOST II AUS	34 (10.5)	324	36 (11.0)	327	0.94 (0.61, 1.47)	0.796	
	NeOProM	**215 (16.5)**	**1301**	**210 (15.9)**	**1321**	**1.03 (0.87, 1.21)**	**0.756**	
Inborn	SUPPORT	118 (22.7)	520	128 (23.3)	549	0.98 (0.78, 1.22)	0.857	0.169
	COT	70 (14.8)	473	59 (12.6)	467	1.17 (0.85, 1.59)	0.331	
	BOOST NZ	32 (20.1)	159	40 (25.5)	157	0.79 (0.52, 1.19)	0.259	
	BOOST II UK	128 (39.4)	325	126 (37.1)	340	1.03 (0.86, 1.24)	0.735	
	BOOST II AUS	75 (14.4)	520	88 (16.8)	525	0.86 (0.65, 1.15)	0.306	
	NeOProM	**423 (21.2)**	**1997**	**441 (21.6)**	**2038**	**0.99 (0.88, 1.11)**	**0.836**	
Outborn	SUPPORT		.		.		.	
	COT	10 (29.4)	34	9 (20.0)	45	2.43 (0.39, 15.2)	0.343	
	BOOST NZ	2 (18.2)	11	1 (7.7)	13	2.31 (0.25, 21.2)	0.458	
	BOOST II UK	13 (29.5)	44	12 (25.5)	47	1.16 (0.59, 2.30)	0.669	
	BOOST II AUS	7 (15.9)	44	3 (7.1)	42	2.03 (0.59, 7.06)	0.263	
	NeOProM	**32 (24.1)**	**133**	**25 (17.0)**	**147**	**1.42 (0.90, 2.25)**	**0.134**	
Vaginal	SUPPORT	35 (21.0)	167	34 (18.4)	185	1.14 (0.75, 1.74)	0.544	0.193
	COT	28 (15.1)	186	30 (14.5)	207	1.04 (0.65, 1.66)	0.884	
	BOOST NZ	12 (16.0)	75	15 (19.0)	79	0.82 (0.41, 1.63)	0.566	
	BOOST II UK	85 (40.1)	212	81 (35.2)	230	1.10 (0.88, 1.38)	0.411	
	BOOST II AUS	41 (15.1)	271	35 (13.6)	257	1.10 (0.73, 1.67)	0.638	
	NeOProM	**201 (22.1)**	**911**	**195 (20.4)**	**958**	**1.10 (0.93, 1.30)**	**0.273**	
Caesarean	SUPPORT	83 (23.5)	353	94 (25.8)	364	0.93 (0.72, 1.20)	0.574	
	COT	52 (16.3)	320	38 (12.5)	304	1.30 (0.90, 1.88)	0.164	
	BOOST NZ	22 (23.2)	95	26 (28.6)	91	0.80 (0.49, 1.31)	0.386	
	BOOST II UK	56 (35.7)	157	57 (36.3)	157	0.97 (0.73, 1.29)	0.832	
	BOOST II AUS	41 (14.0)	292	56 (18.3)	306	0.77 (0.53, 1.12)	0.178	
	NeOProM	**254 (20.9)**	**1217**	**271 (22.2)**	**1222**	**0.95 (0.82, 1.10)**	**0.455**	
ANS - No	SUPPORT	0	18	3 (12.0)	25		***	0.885
	COT	7 (14.6)	48	9 (19.1)	47	0.77 (0.34, 1.76)	0.537	
	BOOST NZ	3 (15.0)	20	3 (16.7)	18	0.83 (0.18, 3.79)	0.814	
	BOOST II UK	13 (48.1)	27	9 (30.0)	30	1.60 (0.82, 3.14)	0.567	

eTable 31. Discharged home on oxygen, by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	BOOST II AUS	6 (9.5)	63	6 (14.3)	42	0.66 (0.23, 1.94)	0.452	
	NeOProM	**29 (16.5)**	**176**	**30 (18.5)**	**162**	**1.00 (0.64, 1.55)**	**0.993**	
ANS - Yes	SUPPORT	118 (23.5)	502	125 (23.9)	524	0.99 (0.80, 1.24)	0.957	
	COT	72 (15.7)	458	59 (12.7)	465	1.24 (0.91, 1.68)	0.178	
	BOOST NZ	31 (20.7)	150	38 (25.0)	152	0.83 (0.54, 1.26)	0.375	
	BOOST II UK	128 (37.5)	341	127 (35.8)	355	1.03 (0.85, 1.24)	0.767	
	BOOST II AUS	74 (14.8)	499	84 (16.2)	519	0.92 (0.68, 1.23)	0.560	
	NeOProM	**423 (21.7)**	**1950**	**433 (21.5)**	**2015**	**1.01 (0.90, 1.13)**	**0.852**	
Male	SUPPORT	68 (26.3)	259	69 (22.9)	301	1.16 (0.86, 1.56)	0.336	0.536
	COT	44 (16.0)	275	36 (13.5)	267	1.19 (0.80, 1.77)	0.397	
	BOOST NZ	17 (18.9)	90	28 (31.1)	90	0.60 (0.36, 1.01)	0.054	
	BOOST II UK	75 (39.1)	192	78 (38.2)	204	1.01 (0.80, 1.29)	0.905	
	BOOST II AUS	49 (16.8)	292	47 (15.9)	296	1.06 (0.73, 1.54)	0.770	
	NeOProM	**253 (22.8)**	**1108**	**258 (22.3)**	**1158**	**1.04 (0.89, 1.20)**	**0.638**	
Female	SUPPORT	50 (19.2)	261	59 (23.8)	248	0.80 (0.57, 1.11)	0.185	
	COT	36 (15.5)	232	32 (13.1)	245	1.17 (0.76, 1.80)	0.475	
	BOOST NZ	17 (21.3)	80	13 (16.3)	80	1.31 (0.68, 2.52)	0.417	
	BOOST II UK	66 (37.3)	177	60 (32.8)	183	1.09 (0.83, 1.43)	0.533	
	BOOST II AUS	33 (12.1)	272	44 (16.2)	271	0.74 (0.48, 1.13)	0.163	
	NeOProM	**202 (19.8)**	**1022**	**208 (20.3)**	**1027**	**0.98 (0.83, 1.16)**	**0.783**	
Singleton	SUPPORT	93 (23.9)	389	102 (24.6)	414	0.97 (0.76, 1.24)	0.809	0.790
	COT	56 (16.5)	339	48 (13.4)	358	1.23 (0.86, 1.76)	0.250	
	BOOST NZ	26 (21.0)	124	30 (24.2)	124	0.87 (0.55, 1.38)	0.544	
	BOOST II UK	103 (39.6)	260	105 (37.5)	280	1.06 (0.85, 1.31)	0.614	
	BOOST II AUS	64 (15.0)	426	75 (17.4)	432	0.87 (0.64, 1.17)	0.354	
	NeOProM	**342 (22.2)**	**1538**	**360 (22.4)**	**1608**	**1.00 (0.88, 1.14)**	**0.974**	
Multiple	SUPPORT	25 (19.1)	131	26 (19.3)	135	1.03 (0.60, 1.75)	0.916	
	COT	24 (14.3)	168	20 (13.0)	154	1.10 (0.67, 1.80)	0.701	
	BOOST NZ	8 (17.4)	46	11 (23.9)	46	0.73 (0.32, 1.66)	0.449	
	BOOST II UK	38 (34.9)	109	33 (30.8)	107	1.02 (0.72, 1.45)	0.900	
	BOOST II AUS	18 (13.0)	138	16 (11.9)	135	1.10 (0.55, 2.19)	0.784	
	NeOProM	**113 (19.1)**	**592**	**106 (18.4)**	**577**	**1.04 (0.82, 1.31)**	**0.752**	
start<6 hrs	SUPPORT	115 (22.6)	509	126 (23.4)	539	0.97 (0.78, 1.22)	0.804	0.872
	COT	4 (16.7)	24	5 (21.7)	23	0.78 (0.25, 2.48)	0.674	
	BOOST NZ	8 (28.6)	28	5 (17.9)	28	1.30 (0.53, 3.16)	0.565	
	BOOST II UK		.		.		.	
	BOOST II AUS	10 (17.5)	57	13 (21.7)	60	0.83 (0.39, 1.74)	0.618	
	NeOProM	**137 (22.2)**	**618**	**149 (22.9)**	**650**	**0.97 (0.79, 1.19)**	**0.756**	
>=6 hrs	SUPPORT	2 (40.0)	5	1 (25.0)	4	1.60 (0.21, 11.9)	0.646	
	COT	76 (15.7)	483	63 (12.9)	489	1.22 (0.90, 1.65)	0.195	
	BOOST NZ	26 (18.3)	142	36 (25.5)	141	0.71 (0.45, 1.13)	0.150	

eTable 31. Discharged home on oxygen, by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	BOOST II UK		.		.		.	
	BOOST II AUS	72 (14.3)	505	78 (15.4)	506	0.93 (0.69, 1.25)	0.620	
	NeOProM	**176 (15.5)**	**1135**	**178 (15.6)**	**1140**	**0.99 (0.82, 1.20)**	**0.907**	
Original	SUPPORT	118 (22.7)	520	128 (23.3)	549	0.98 (0.78, 1.22)	0.857	0.465
software	COT	43 (18.1)	238	29 (12.6)	230	1.46 (0.96, 2.23)	0.077	
	BOOST NZ	34 (20.0)	170	41 (24.1)	170	0.83 (0.55, 1.24)	0.364	
	BOOST II UK	34 (36.6)	93	33 (38.8)	85	0.98 (0.69, 1.37)	0.887	
	BOOST II AUS	45 (13.1)	344	53 (15.3)	346	0.86 (0.59, 1.25)	0.427	
	NeOProM	**274 (20.1)**	**1365**	**284 (20.6)**	**1380**	**0.98 (0.85, 1.13)**	**0.771**	
Revised	SUPPORT		.		.		.	
software	COT	33 (13.8)	239	32 (13.2)	242	1.02 (0.66, 1.58)	0.924	
	BOOST NZ		.		.		.	
	BOOST II UK	107 (38.8)	276	105 (34.8)	302	1.07 (0.87, 1.32)	0.502	
	BOOST II AUS	37 (16.8)	220	38 (17.2)	221	0.98 (0.64, 1.49)	0.915	
	NeOProM	**177 (24.1)**	**735**	**175 (22.9)**	**765**	**1.06 (0.90, 1.27)**	**0.481**	
SGA:	SUPPORT	110 (21.9)	502	108 (21.2)	509	1.04 (0.82, 1.32)	0.747	0.357
Trialist	COT	69 (14.8)	467	60 (12.6)	475	1.16 (0.85, 1.59)	0.346	
defined -	BOOST II NZ	27 (17.6)	153	33 (21.0)	157	0.84 (0.53, 1.33)	0.453	
No	BOOST II UK	115 (36.7)	313	108 (32.6)	331	1.12 (0.91, 1.37)	0.280	
	BOOST II AUS	63 (13.0)	485	74 (15.1)	489	0.86 (0.62, 1.18)	0.336	
	NeOProM	**384 (20.0)**	**1920**	**383 (19.5)**	**1961**	**1.03 (0.91, 1.17)**	**0.598**	
Yes	SUPPORT	8 (44.4)	18	20 (50.0)	40	0.89 (0.52, 1.51)	0.664	
	COT	11 (27.5)	40	8 (21.6)	37	1.27 (0.58, 2.81)	0.674	
	BOOST II NZ	7 (41.2)	17	8 (61.5)	13	0.70 (0.33, 1.46)	0.338	
	BOOST II UK	26 (47.3)	55	29 (52.7)	55	0.88 (0.60, 1.29)	0.503	
	BOOST II AUS	19 (24.1)	79	17 (21.8)	78	1.12 (0.63, 1.99)	0.696	
	NeOProM	**71 (34.0)**	**209**	**82 (36.8)**	**223**	**0.96 (0.74, 1.23)**	**0.724**	
SGA:	SUPPORT	99 (21.7)	456	95 (20.6)	462	1.07 (0.83, 1.38)	0.609	0.640
NeOProM	COT	69 (14.8)	467	60 (12.6)	475	1.16 (0.85, 1.59)	0.346	
defined -	BOOST II NZ	27 (17.6)	153	33 (21.0)	157	0.84 (0.53, 1.33)	0.453	
No	BOOST II UK	119 (36.2)	329	118 (33.9)	348	1.06 (0.87, 1.29)	0.572	
	BOOST II AUS	63 (13.0)	485	74 (15.1)	489	0.86 (0.62, 1.18)	0.336	
	NeOProM	**377 (19.9)**	**1890**	**380 (19.7)**	**1931**	**1.02 (0.90, 1.16)**	**0.744**	
Yes	SUPPORT	19 (29.7)	64	33 (37.9)	87	0.79 (0.50, 1.25)	0.312	
	COT	11 (27.5)	40	8 (21.6)	37	1.00 (1.00, 1.00)	0.674	
	BOOST II NZ	7 (41.2)	17	8 (61.5)	13	0.70 (0.33, 1.46)	0.338	
	BOOST II UK	22 (55.0)	40	20 (51.3)	39	1.05 (0.69, 1.60)	0.813	
	BOOST II AUS	19 (24.1)	79	17 (21.8)	78	1.12 (0.63, 1.99)	0.696	
	NeOProM	**78 (32.5)**	**240**	**86 (33.9)**	**254**	**0.96 (0.75, 1.22)**	**0.721**	

* Analysis adjusted for trials and multiple births

Abbreviations/definitions

CI: confidence interval; RR: relative risk; GA: gestational age; SUPPORT: Surfactant Positive Airway Pressure and Pulse Oximetry Trial; COT: Canadian Oxygen Trial; BOOST: Benefits of Oxygen Saturation Targeting; NZ: New Zealand; UK: United Kingdom; AUS: Australia; NeOProM: Neonatal Oxygenation Prospective Meta-analysis; inborn: born inside the treating center; outborn: born outside the treating center (e.g. transferred from another hospital; vaginal: mode of delivery through the vagina; Caesarean: mode of delivery via surgical procedure; ANS: antenatal corticosteroids; singleton: child born as a single birth; multiple: more than one child per birth; start<6 hrs: intervention commenced less than 6 hours after birth; start>=6 hrs: intervention commenced greater than or equal to 6 hours after birth; original software: original oximeter software; revised software: revised oximeter software; SGA: small for gestational age; SGA NeOProM defined: small for gestational age as per definition used by NeOProM collaboration, i.e. less than 10th percentile using charts from Kramer et al.[1]

The subgroup analysis by oximeter software type (original vs revised) excludes n=74 infants in COT who were exposed to both the original and revised software.

Empty cells (.) indicate data not collected or not applicable in this trial.

*** Low / no event rate(s) makes parameter not estimable.

eTable 32. Re-admission to hospital, by subgroups

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
GA<26 wks	SUPPORT	87 (50.3)	173	111 (55.0)	202	0.91 (0.75, 1.11)	0.358	0.242
	COT	102 (54.0)	189	78 (42.6)	183	1.24 (1.00, 1.54)	0.049	
	BOOST NZ	43 (86.0)	50	39 (70.9)	55	1.21 (0.98, 1.48)	0.071	
	BOOST II UK	62 (67.4)	92	67 (67.0)	100	1.03 (0.85, 1.23)	0.784	
	BOOST II AUS	100 (66.7)	150	111 (67.3)	165	1.00 (0.86, 1.16)	0.980	
	NeOProM	**394 (60.2)**	**654**	**406 (57.6)**	**705**	**1.06 (0.97, 1.15)**	**0.180**	
GA>=26 wks	SUPPORT	123 (40.3)	305	129 (41.0)	315	0.98 (0.81, 1.19)	0.838	
	COT	119 (40.1)	297	123 (40.6)	303	0.99 (0.82, 1.19)	0.903	
	BOOST NZ	63 (70.8)	89	57 (69.5)	82	1.02 (0.86, 1.21)	0.835	
	BOOST II UK	100 (62.9)	159	109 (67.7)	161	0.93 (0.79, 1.09)	0.377	
	BOOST II AUS	143 (57.2)	250	143 (56.5)	253	1.02 (0.87, 1.18)	0.818	
	NeOProM	**548 (49.8)**	**1100**	**561 (50.4)**	**1114**	**0.99 (0.91, 1.07)**	**0.723**	
Inborn	SUPPORT	210 (43.9)	478	240 (46.4)	517	0.95 (0.82, 1.09)	0.430	0.769
	COT	204 (45.1)	452	182 (41.1)	443	1.09 (0.94, 1.26)	0.252	
	BOOST NZ	99 (76.7)	129	91 (70.5)	129	1.09 (0.95, 1.26)	0.200	
	BOOST II UK	141 (64.1)	220	156 (69.0)	226	0.93 (0.82, 1.06)	0.286	
	BOOST II AUS	227 (61.2)	371	238 (60.3)	395	1.02 (0.91, 1.14)	0.723	
	NeOProM	**881 (53.4)**	**1650**	**907 (53.0)**	**1710**	**1.01 (0.95, 1.07)**	**0.714**	
Outborn	SUPPORT		.		.		.	
	COT	17 (50.0)	34	19 (44.2)	43	1.69 (0.69, 4.17)	0.253	
	BOOST NZ	7 (70.0)	10	5 (62.5)	8	1.12 (0.57, 2.20)	0.972	
	BOOST II UK	21 (67.7)	31	20 (57.1)	35	1.23 (0.86, 1.75)	0.264	
	BOOST II AUS	16 (55.2)	29	16 (69.6)	23	0.67 (0.34, 1.34)	0.260	
	NeOProM	**61 (58.7)**	**104**	**60 (55.0)**	**109**	**1.06 (0.85, 1.33)**	**0.601**	
Vaginal	SUPPORT	68 (46.3)	147	82 (45.8)	179	1.02 (0.80, 1.29)	0.885	0.664
	COT	79 (43.9)	180	75 (38.3)	196	1.13 (0.90, 1.43)	0.302	
	BOOST NZ	47 (82.5)	57	44 (72.1)	61	1.23 (0.84, 1.81)	0.290	
	BOOST II UK	90 (60.8)	148	100 (65.4)	153	0.94 (0.79, 1.12)	0.493	
	BOOST II AUS	117 (60.9)	192	110 (59.8)	184	1.02 (0.86, 1.20)	0.844	
	NeOProM	**401 (55.4)**	**724**	**411 (53.2)**	**773**	**1.03 (0.95, 1.12)**	**0.484**	
Caesarean	SUPPORT	142 (42.9)	331	158 (46.7)	338	0.91 (0.77, 1.08)	0.298	
	COT	142 (46.4)	306	126 (43.6)	289	1.06 (0.89, 1.26)	0.491	
	BOOST NZ	59 (72.0)	82	52 (68.4)	76	1.06 (0.87, 1.28)	0.580	
	BOOST II UK	72 (69.9)	103	76 (70.4)	108	1.00 (0.84, 1.18)	0.968	
	BOOST II AUS	125 (60.4)	207	143 (61.9)	231	1.02 (0.88, 1.18)	0.805	
	NeOProM	**540 (52.5)**	**1029**	**555 (53.3)**	**1042**	**1.00 (0.93, 1.08)**	**0.925**	
ANS - No	SUPPORT	9 (52.9)	17	11 (45.8)	24	1.24 (0.63, 2.41)	0.535	0.609
	COT	23 (50.0)	46	22 (51.2)	43	0.61 (0.26, 1.47)	0.271	
	BOOST NZ	14 (87.5)	16	8 (72.7)	11	1.20 (0.82, 1.77)	0.349	
	BOOST II UK	14 (73.7)	19	14 (63.6)	22	1.19 (0.80, 1.76)	0.397	

eTable 32. Re-admission to hospital, by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	BOOST II AUS	20 (47.6)	42	17 (70.8)	24	0.67 (0.44, 1.04)	0.072	
	NeOProM	**80 (57.1)**	**140**	**72 (58.1)**	**124**	**0.99 (0.82, 1.21)**	**0.940**	
ANS - Yes	SUPPORT	201 (43.6)	461	229 (46.5)	493	0.93 (0.81, 1.08)	0.353	
	COT	198 (45.1)	439	179 (40.4)	443	1.11 (0.96, 1.29)	0.167	
	BOOST NZ	92 (74.8)	123	88 (69.8)	126	1.08 (0.93, 1.24)	0.326	
	BOOST II UK	147 (63.6)	231	160 (67.5)	237	0.95 (0.83, 1.08)	0.420	
	BOOST II AUS	221 (62.1)	356	234 (60.2)	389	1.04 (0.93, 1.16)	0.503	
	NeOProM	**859 (53.4)**	**1610**	**890 (52.7)**	**1688**	**1.02 (0.96, 1.08)**	**0.575**	
Male	SUPPORT	114 (47.5)	240	144 (50.3)	286	0.90 (0.76, 1.08)	0.272	0.286
	COT	131 (48.9)	268	105 (41.8)	251	1.15 (0.96, 1.38)	0.141	
	BOOST NZ	55 (78.6)	70	60 (82.2)	73	0.95 (0.83, 1.08)	0.419	
	BOOST II UK	95 (73.1)	130	96 (70.1)	137	1.04 (0.90, 1.21)	0.580	
	BOOST II AUS	138 (68.3)	202	129 (62.0)	208	1.09 (0.95, 1.26)	0.209	
	NeOProM	**533 (58.6)**	**910**	**534 (55.9)**	**955**	**1.03 (0.96, 1.10)**	**0.437**	
Female	SUPPORT	96 (40.3)	238	96 (41.6)	231	0.98 (0.79, 1.22)	0.885	
	COT	90 (41.3)	218	96 (40.9)	235	1.00 (0.81, 1.25)	0.975	
	BOOST NZ	51 (73.9)	69	36 (56.3)	64	1.35 (1.04, 1.74)	0.022	
	BOOST II UK	67 (55.4)	121	80 (64.5)	124	0.86 (0.70, 1.06)	0.166	
	BOOST II AUS	105 (53.0)	198	125 (59.5)	210	0.89 (0.75, 1.06)	0.200	
	NeOProM	**409 (48.5)**	**844**	**433 (50.1)**	**864**	**0.97 (0.88, 1.06)**	**0.514**	
Singleton	SUPPORT	170 (48.0)	354	198 (51.2)	387	0.94 (0.81, 1.09)	0.394	0.104
	COT	149 (45.7)	326	146 (43.3)	337	1.05 (0.89, 1.25)	0.537	
	BOOST NZ	79 (78.2)	101	71 (70.3)	101	1.11 (0.95, 1.31)	0.200	
	BOOST II UK	111 (62.7)	177	129 (70.5)	183	0.89 (0.77, 1.03)	0.120	
	BOOST II AUS	187 (62.3)	300	202 (63.3)	319	0.98 (0.87, 1.11)	0.799	
	NeOProM	**696 (55.3)**	**1258**	**746 (56.2)**	**1327**	**0.98 (0.92, 1.05)**	**0.639**	
Multiple	SUPPORT	40 (32.3)	124	42 (32.3)	130	1.00 (0.67, 1.50)	0.990	
	COT	72 (45.0)	160	55 (36.9)	149	1.18 (0.92, 1.51)	0.198	
	BOOST NZ	27 (71.1)	38	25 (69.4)	36	1.04 (0.82, 1.33)	0.724	
	BOOST II UK	51 (68.9)	74	47 (60.3)	78	1.14 (0.91, 1.44)	0.261	
	BOOST II AUS	56 (56.0)	100	52 (52.5)	99	1.07 (0.84, 1.37)	0.585	
	NeOProM	**246 (49.6)**	**496**	**221 (44.9)**	**492**	**1.10 (0.98, 1.24)**	**0.108**	
start<6 hrs	SUPPORT	206 (44.1)	467	236 (46.5)	507	0.95 (0.82, 1.09)	0.434	0.175
	COT	10 (43.5)	23	13 (61.9)	21	0.70 (0.41, 1.21)	0.204	
	BOOST NZ	16 (72.7)	22	14 (56.0)	25	1.11 (0.94, 1.31)	0.234	
	BOOST II UK		.		.		.	
	BOOST II AUS	22 (57.9)	38	34 (66.7)	51	0.87 (0.62, 1.21)	0.403	
	NeOProM	**254 (46.2)**	**550**	**297 (49.2)**	**604**	**0.95 (0.84, 1.07)**	**0.409**	
>=6 hrs	SUPPORT	4 (80.0)	5	1 (25.0)	4	3.20 (0.55, 18.5)	0.193	
	COT	211 (45.6)	463	188 (40.4)	465	1.12 (0.97, 1.29)	0.130	
	BOOST NZ	90 (76.9)	117	82 (73.2)	112	1.06 (0.91, 1.22)	0.460	

eTable 32. Re-admission to hospital, by subgroups (continued)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
	BOOST II UK		.		.		.	
	BOOST II AUS	220 (60.9)	361	220 (59.9)	367	1.02 (0.91, 1.14)	0.764	
	NeOProM	**525 (55.5)**	**946**	**491 (51.8)**	**948**	**1.06 (0.98, 1.14)**	**0.144**	
Original	SUPPORT	210 (43.9)	478	240 (46.4)	517	0.95 (0.82, 1.09)	0.430	0.449
software	COT	112 (48.7)	230	95 (43.6)	218	1.14 (0.94, 1.38)	0.185	
	BOOST NZ	106 (76.3)	139	96 (70.1)	137	1.09 (0.95, 1.25)	0.210	
	BOOST II UK	40 (63.5)	63	44 (78.6)	56	0.83 (0.69, 1.00)	0.055	
	BOOST II AUS	150 (61.0)	246	162 (61.6)	263	1.00 (0.87, 1.15)	0.995	
	NeOProM	**618 (53.5)**	**1156**	**637 (53.5)**	**1191**	**1.01 (0.94, 1.08)**	**0.828**	
Revised	SUPPORT		.		.		.	
software	COT	103 (45.4)	227	85 (36.8)	231	1.22 (0.98, 1.52)	0.071	
	BOOST NZ		.		.		.	
	BOOST II UK	122 (64.9)	188	132 (64.4)	205	1.01 (0.87, 1.17)	0.903	
	BOOST II AUS	93 (60.4)	154	92 (59.4)	155	1.02 (0.85, 1.22)	0.852	
	NeOProM	**318 (55.9)**	**569**	**309 (52.3)**	**591**	**1.05 (0.95, 1.16)**	**0.309**	
SGA:	SUPPORT	204 (44.3)	461	222 (46.3)	479	0.95 (0.82, 1.10)	0.476	0.526
Trialist	COT	201 (45.1)	446	182 (40.4)	450	1.11 (0.96, 1.29)	0.157	
defined -	BOOST II NZ	94 (75.8)	124	89 (69.0)	129	1.10 (0.95, 1.28)	0.211	
No	BOOST II UK	134 (63.2)	212	146 (66.4)	220	0.96 (0.84, 1.10)	0.566	
	BOOST II AUS	208 (59.4)	350	214 (59.3)	361	1.01 (0.90, 1.14)	0.858	
	NeOProM	**841 (52.8)**	**1593**	**853 (52.0)**	**1639**	**1.02 (0.96, 1.09)**	**0.495**	
Yes	SUPPORT	6 (35.3)	17	18 (47.4)	38	0.77 (0.37, 1.60)	0.480	
	COT	20 (50.0)	40	19 (52.8)	36	0.98 (0.86, 1.13)	0.805	
	BOOST II NZ	12 (80.0)	15	7 (87.5)	8	0.92 (0.63, 1.33)	0.654	
	BOOST II UK	28 (71.8)	39	29 (72.5)	40	0.98 (0.75, 1.30)	0.912	
	BOOST II AUS	35 (70.0)	50	40 (70.2)	57	1.00 (0.78, 1.28)	0.984	
	NeOProM	**101 (62.7)**	**161**	**113 (63.1)**	**179**	**0.96 (0.83, 1.12)**	**0.633**	
SGA:	SUPPORT	180 (43.2)	417	200 (45.7)	438	0.94 (0.81, 1.09)	0.423	0.535
NeOProM	COT	201 (45.1)	446	182 (40.4)	450	1.11 (0.96, 1.29)	0.157	
defined -	BOOST II NZ	94 (75.8)	124	89 (69.0)	129	1.10 (0.95, 1.28)	0.211	
No	BOOST II UK	140 (63.1)	222	152 (66.1)	230	0.96 (0.84, 1.10)	0.581	
	BOOST II AUS	208 (59.4)	350	214 (59.3)	361	1.01 (0.90, 1.14)	0.858	
	NeOProM	**823 (52.8)**	**1559**	**837 (52.1)**	**1608**	**1.02 (0.96, 1.09)**	**0.513**	
Yes	SUPPORT	30 (49.2)	61	40 (50.6)	79	0.97 (0.70, 1.36)	0.879	
	COT	20 (50.0)	40	19 (52.8)	36	0.98 (0.86, 1.13)	0.805	
	BOOST II NZ	12 (80.0)	15	7 (87.5)	8	0.92 (0.63, 1.33)	0.654	
	BOOST II UK	22 (75.9)	29	24 (77.4)	31	0.97 (0.73, 1.29)	0.859	
	BOOST II AUS	35 (70.0)	50	40 (70.2)	57	1.00 (0.78, 1.28)	0.984	
	NeOProM	**119 (61.0)**	**195**	**130 (61.6)**	**211**	**0.97 (0.84, 1.13)**	**0.714**	

* Analysis adjusted for trials and multiple births

Abbreviations/definitions

CI: confidence interval; RR: relative risk; GA: gestational age; SUPPORT: Surfactant Positive Airway Pressure and Pulse Oximetry Trial; COT: Canadian Oxygen Trial; BOOST: Benefits of Oxygen Saturation Targeting; NZ: New Zealand; UK: United Kingdom; AUS: Australia; NeOProM: Neonatal Oxygenation Prospective Meta-analysis; inborn: born inside the treating center; outborn: born outside the treating center (e.g. transferred from another hospital; vaginal: mode of delivery through the vagina; Caesarean: mode of delivery via surgical procedure; ANS: antenatal corticosteroids; singleton: child born as a single birth; multiple: more than one child per birth; start<6 hrs: intervention commenced less than 6 hours after birth; start>=6 hrs: intervention commenced greater than or equal to 6 hours after birth; original software: original oximeter software; revised software: revised oximeter software; SGA: small for gestational age; SGA NeOProM defined: small for gestational age as per definition used by NeOProM collaboration, i.e. less than 10th percentile using charts from Kramer et al.[1]

The subgroup analysis by oximeter software type (original vs revised) excludes n=74 infants in COT who were exposed to both the original and revised software.

Empty cells (.) indicate data not collected or not applicable in this trial.

Post-hoc subgroup analyses

eTable 33. Outcomes, by SUPPORT-defined small for gestational age (SGA) subgroups

Using the same definition of SGA as the SUPPORT analysis,[8] i.e. the Alexander curves.[9]

Footnotes for all the data in Table W33:

* Analysis adjusted for trials and multiple births

Abbreviations/definitions

CI: confidence interval; RR: relative risk; SGA: small for gestational age; SUPPORT: Surfactant Positive Airway Pressure and Pulse Oximetry Trial; COT: Canadian Oxygen Trial; BOOST: Benefits of Oxygen Saturation Targeting; NZ: New Zealand; UK: United Kingdom; AUS: Australia; NeOProM: Neonatal Oxygenation Prospective Meta-analysis.

The subgroup analysis by oximeter software type (original vs revised) excludes n=74 infants in COT who were exposed to both the original and revised software.

Empty cells (.) indicate data not collected or not applicable in this trial.

*** Low / no event rate(s) makes parameter not estimable.

Death or disability (primary analysis)^

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
SGA	SUPPORT	330 (57.6)	573	333 (58.4)	570	0.99 (0.89, 1.09)	0.803	0.671
SUPPORT	COT	273 (50.7)	538	260 (48.6)	535	1.02 (0.91, 1.14)	0.757	
Defined	BOOST II NZ	56 (42.4)	132	67 (48.9)	137	0.87 (0.68, 1.13)	0.302	
No	BOOST II UK	211 (59.3)	356	190 (54.0)	352	1.11 (0.98, 1.26)	0.100	
	BOOST II AUS	203 (44.8)	453	187 (40.8)	458	1.09 (0.94, 1.26)	0.250	
	NeOProM	**1073 (52.3)**	**2052**	**1037 (50.5)**	**2052**	**1.03 (0.97, 1.09)**	**0.290**	
Yes	SUPPORT	33 (82.5)	40	41 (75.9)	54	1.09 (0.88, 1.34)	0.420	
	COT	25 (64.1)	39	22 (66.7)	33	0.96 (0.69, 1.35)	0.819	
	BOOST II NZ	6 (54.5)	11	4 (57.1)	7	0.95 (0.41, 2.21)	0.913	
	BOOST II UK	20 (62.5)	32	21 (63.6)	33	1.00 (0.68, 1.46)	0.997	
	BOOST II AUS	34 (63.0)	54	25 (50.0)	50	1.25 (0.90, 1.72)	0.184	
	NeOProM	**118 (67.0)**	**176**	**113 (63.8)**	**177**	**1.07 (0.93, 1.24)**	**0.348**	

^ **Primary outcome as pre-specified in published NeOProM protocol**: composite outcome of death or major disability by 18-24 months' age, corrected for prematurity. Major disability is any of the following: Bayley-III Developmental Assessment cognitive score <85 and/or language score <85; severe visual loss; cerebral palsy with Gross Motor Function Classification System (GMFCS) level 2 or higher at 18-24 months' age, corrected for prematurity; or deafness requiring hearing aids.

Death or disability (supportive)[#]

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
SGA	SUPPORT	331 (57.7)	574	333 (58.4)	570	0.99 (0.89, 1.09)	0.824	0.900
SUPPORT	COT	273 (50.7)	538	261 (48.7)	536	1.02 (0.91, 1.14)	0.779	
Defined	BOOST II NZ	59 (37.8)	156	70 (43.5)	161	0.87 (0.67, 1.12)	0.276	
No	BOOST II UK	222 (51.5)	431	197 (45.8)	430	1.13 (0.99, 1.29)	0.071	
	BOOST II AUS	211 (43.1)	489	192 (39.2)	490	1.10 (0.95, 1.27)	0.211	
	NeOProM	**1096 (50.1)**	**2188**	**1053 (48.1)**	**2187**	**1.03 (0.98, 1.10)**	**0.254**	
Yes	SUPPORT	33 (82.5)	40	41 (75.9)	54	1.09 (0.88, 1.34)	0.420	
	COT	25 (62.5)	40	22 (66.7)	33	0.94 (0.67, 1.32)	0.710	
	BOOST II NZ	6 (54.5)	11	4 (57.1)	7	0.95 (0.41, 2.21)	0.913	
	BOOST II UK	23 (54.8)	42	23 (60.5)	38	0.91 (0.62, 1.33)	0.619	
	BOOST II AUS	34 (61.8)	55	25 (50.0)	50	1.22 (0.88, 1.69)	0.224	
	NeOProM	**121 (64.4)**	**188**	**115 (63.2)**	**182**	**1.05 (0.91, 1.21)**	**0.504**	

 # Supportive analysis of primary outcome: including using alternative sources of information for classifying major disability as used within individual trials. This may have included a Bayley-II Mental Developmental Index (MDI) score <70, or another validated assessment tool (e.g. Griffiths test), or a paediatrician assessment, or parent-reported measure of neurodevelopmental impairment (e.g. able to speak less than 5-10 words) or other measures.

Death or disability (secondary)[+]

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
SGA	SUPPORT	187 (32.6)	573	189 (33.2)	570	0.99 (0.83, 1.17)	0.867	0.995
SUPPORT	COT	163 (31.5)	517	152 (29.3)	519	1.04 (0.87, 1.25)	0.644	
Defined	BOOST II NZ	32 (24.2)	132	35 (25.9)	135	0.93 (0.62, 1.38)	0.705	
No	BOOST II UK	177 (49.9)	355	154 (44.0)	350	1.13 (0.97, 1.32)	0.125	
	BOOST II AUS	136 (30.2)	451	126 (27.6)	456	1.08 (0.88, 1.32)	0.481	
	NeOProM	**695 (34.3)**	**2028**	**656 (32.3)**	**2030**	**1.05 (0.97, 1.15)**	**0.220**	
Yes	SUPPORT	30 (75.0)	40	33 (61.1)	54	1.20 (0.91, 1.59)	0.186	
	COT	17 (43.6)	39	15 (46.9)	32	0.93 (0.56, 1.55)	0.781	
	BOOST II NZ	3 (27.3)	11	4 (57.1)	7	0.48 (0.15, 1.52)	0.211	
	BOOST II UK	17 (53.1)	32	17 (51.5)	33	1.04 (0.65, 1.68)	0.868	
	BOOST II AUS	22 (40.7)	54	18 (36.0)	50	1.13 (0.69, 1.85)	0.726	
	NeOProM	**89 (50.6)**	**176**	**87 (49.4)**	**176**	**1.01 (0.87, 1.31)**	**0.530**	

+ Secondary analysis: composite outcome of death or major disability by 18-24 months' age, corrected for prematurity. Major disability is any of the following: Bayley-III Developmental Assessment cognitive score <70 and/or language score <70; severe visual loss; cerebral palsy with Gross Motor Function Classification System (GMFCS) level 2 or higher at 18-24 months' age, corrected for prematurity; or deafness requiring hearing aids.

Death or disability (trialist defined)~

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
SGA	SUPPORT	156 (27.3)	572	146 (25.7)	568	1.07 (0.87, 1.30)	0.527	0.978
SUPPORT	COT	273 (50.7)	538	261 (48.7)	536	1.02 (0.91, 1.14)	0.779	
Defined	BOOST II NZ	59 (37.8)	156	72 (44.7)	161	0.85 (0.66, 1.09)	0.205	
No	BOOST II UK	222 (51.5)	431	197 (45.8)	430	1.13 (0.99, 1.29)	0.071	
	BOOST II AUS	212 (43.0)	493	192 (38.9)	494	1.10 (0.95, 1.27)	0.196	
	NeOProM	**922 (42.1)**	**2190**	**868 (39.7)**	**2189**	**1.06 (0.99, 1.13)**	**0.100**	
Yes	SUPPORT	29 (72.5)	40	25 (46.3)	54	1.54 (1.09, 2.17)	0.014	
	COT	25 (62.5)	40	22 (66.7)	33	0.94 (0.67, 1.32)	0.710	
	BOOST II NZ	6 (54.5)	11	4 (57.1)	7	0.95 (0.41, 2.21)	0.913	
	BOOST II UK	23 (54.8)	42	23 (60.5)	38	0.91 (0.62, 1.33)	0.619	
	BOOST II AUS	34 (61.8)	55	25 (49.0)	51	1.24 (0.90, 1.72)	0.187	
	NeOProM	**117 (62.2)**	**188**	**99 (54.1)**	**183**	**1.14 (0.95, 1.35)**	**0.153**	

~ Trialist defined analysis: primary outcome as defined by trialists - includes alternative measures of disability as described in 'supportive analysis of primary outcome'

Major disability (primary)^

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
SGA	SUPPORT	214 (46.8)	457	231 (49.4)	468	0.95 (0.83, 1.09)	0.452	0.784
SUPPORT	COT	188 (41.5)	453	183 (40.0)	458	1.01 (0.87, 1.16)	0.921	
Defined	BOOST II NZ	32 (29.6)	108	43 (37.7)	114	0.78 (0.54, 1.13)	0.188	
No	BOOST II UK	102 (41.3)	247	103 (38.9)	265	1.09 (0.89, 1.34)	0.414	
	BOOST II AUS	120 (32.4)	370	108 (28.5)	379	1.14 (0.93, 1.41)	0.207	
	NeOProM	**656 (40.1)**	**1635**	**668 (39.7)**	**1684**	**1.01 (0.93, 1.09)**	**0.875**	
Yes	SUPPORT	9 (56.3)	16	25 (65.8)	38	0.86 (0.53, 1.41)	0.558	
	COT	13 (48.1)	27	11 (50.0)	22	0.96 (0.54, 1.71)	0.897	
	BOOST II NZ	5 (50.0)	10	1 (25.0)	4	2.00 (0.33, 12.2)	0.452	
	BOOST II UK	7 (36.8)	19	10 (45.5)	22	0.81 (0.38, 1.71)	0.581	
	BOOST II AUS	17 (45.9)	37	17 (40.5)	42	1.14 (0.68, 1.88)	0.624	
	NeOProM	**51 (46.8)**	**109**	**64 (50.0)**	**128**	**0.97 (0.75, 1.27)**	**0.850**	

^ Primary outcome as pre-specified in published NeOProM protocol: composite outcome of death or major disability by 18-24 months' age, corrected for prematurity. Major disability is any of the following: Bayley-III Developmental Assessment cognitive score <85 and/or language score <85; severe visual loss; cerebral palsy with Gross Motor Function Classification System (GMFCS) level 2 or higher at 18-24 months' age, corrected for prematurity; or deafness requiring hearing aids.

Major disability (supportive)[#]

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
SGA	SUPPORT	215 (46.9)	458	231 (49.4)	468	0.95 (0.83, 1.09)	0.473	0.582
SUPPORT	COT	188 (41.5)	453	184 (40.1)	459	1.00 (0.87, 1.16)	0.951	
Defined	BOOST II NZ	35 (26.5)	132	47 (34.3)	137	0.77 (0.54, 1.08)	0.132	
No	BOOST II UK	113 (35.1)	322	110 (32.1)	343	1.13 (0.92, 1.39)	0.260	
	BOOST II AUS	128 (31.5)	406	113 (27.5)	411	1.15 (0.94, 1.41)	0.168	
	NeOProM	**679 (38.3)**	**1771**	**685 (37.7)**	**1818**	**1.01 (0.93, 1.10)**	**0.774**	
Yes	SUPPORT	9 (56.3)	16	25 (65.8)	38	0.86 (0.53, 1.41)	0.558	
	COT	13 (46.4)	28	11 (50.0)	22	0.93 (0.52, 1.65)	0.801	
	BOOST II NZ	5 (50.0)	10	1 (25.0)	4	2.00 (0.33, 12.2)	0.452	
	BOOST II UK	10 (34.5)	29	12 (44.4)	27	0.78 (0.40, 1.49)	0.448	
	BOOST II AUS	17 (44.7)	38	17 (40.5)	42	1.11 (0.66, 1.84)	0.700	
	NeOProM	**54 (44.6)**	**121**	**66 (49.6)**	**133**	**0.95 (0.73, 1.24)**	**0.691**	

 # Supportive analysis of primary outcome: including using alternative sources of information for classifying major disability as used within individual trials. This may have included a Bayley-II Mental Developmental Index (MDI) score <70, or another validated assessment tool (e.g. Griffiths test), or a paediatrician assessment, or parent-reported measure of neurodevelopmental impairment (e.g. able to speak less than 5-10 words) or other measures.

Major disability (secondary)[+]

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
SGA	SUPPORT	71 (15.5)	457	87 (18.6)	468	0.81 (0.60, 1.09)	0.170	0.195
SUPPORT	COT	78 (18.1)	432	75 (17.0)	442	1.01 (0.76, 1.35)	0.935	
Defined	BOOST II NZ	8 (7.4)	108	11 (9.9)	111	0.78 (0.33, 1.86)	0.576	
No	BOOST II UK	68 (27.6)	246	67 (25.5)	263	1.09 (0.81, 1.46)	0.573	
	BOOST II AUS	53 (14.4)	368	47 (12.5)	377	1.18 (0.82, 1.70)	0.362	
	NeOProM	**278 (17.3)**	**1611**	**287 (17.3)**	**1661**	**0.99 (0.85, 1.15)**	**0.891**	
Yes	SUPPORT	6 (37.5)	16	17 (44.7)	38	0.82 (0.40, 1.69)	0.587	
	COT	5 (18.5)	27	4 (19.0)	21	0.97 (0.30, 3.18)	0.963	
	BOOST II NZ	2 (20.0)	10	1 (25.0)	4	0.80 (0.10, 6.54)	0.835	
	BOOST II UK	4 (21.1)	19	6 (27.3)	22	0.77 (0.26, 2.33)	0.647	
	BOOST II AUS	5 (13.5)	37	10 (23.8)	42	0.57 (0.21, 1.51)	0.257	
	NeOProM	**22 (20.2)**	**109**	**38 (29.9)**	**127**	**0.76 (0.48, 1.21)**	**0.246**	

+ **Secondary analysis:** composite outcome of death or major disability by 18-24 months' age, corrected for prematurity. Major disability is any of the following: Bayley-III Developmental Assessment cognitive score <70 and/or language score <70; severe visual loss; cerebral palsy with Gross Motor Function Classification System (GMFCS) level 2 or higher at 18-24 months' age, corrected for prematurity; or deafness requiring hearing aids.

Major disability (trialist defined)~

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
SGA	SUPPORT	40 (8.8)	456	44 (9.4)	466	0.90 (0.59, 1.37)	0.612	0.605
SUPPORT	COT	188 (41.5)	453	184 (40.1)	459	1.00 (0.87, 1.16)	0.951	
Defined	BOOST II NZ	35 (26.5)	132	48 (35.0)	137	0.75 (0.53, 1.06)	0.105	
No	BOOST II UK	113 (35.1)	322	110 (32.1)	343	1.13 (0.92, 1.39)	0.260	
	BOOST II AUS	129 (31.5)	410	113 (27.2)	415	1.16 (0.95, 1.42)	0.150	
	NeOProM	**505 (28.5)**	**1773**	**499 (27.4)**	**1820**	**1.04 (0.94, 1.14)**	**0.463**	
Yes	SUPPORT	5 (31.3)	16	9 (23.7)	38	1.30 (0.52, 3.29)	0.575	
	COT	13 (46.4)	28	11 (50.0)	22	0.93 (0.52, 1.65)	0.801	
	BOOST II NZ	5 (50.0)	10	1 (25.0)	4	2.00 (0.33, 12.2)	0.452	
	BOOST II UK	10 (34.5)	29	12 (44.4)	27	0.78 (0.40, 1.49)	0.448	
	BOOST II AUS	17 (44.7)	38	17 (39.5)	43	1.13 (0.68, 1.89)	0.636	
	NeOProM	**50 (41.3)**	**121**	**50 (37.3)**	**134**	**1.03 (0.75, 1.39)**	**0.874**	

~ Trialist defined analysis: primary outcome as defined by trialists - includes alternative measures of disability as described in 'supportive analysis of primary outcome'

Cerebral Palsy at 18-24 months' age corrected for prematurity

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
SGA	SUPPORT	20 (4.3)	462	17 (3.6)	473	1.15 (0.60, 2.18)	0.677	0.265
SUPPORT	COT	28 (6.1)	460	30 (6.5)	465	0.98 (0.60, 1.61)	0.944	
Defined	BOOST II NZ	5 (3.7)	134	7 (5.1)	137	0.74 (0.24, 2.28)	0.601	
No	BOOST II UK	33 (10.2)	324	23 (6.7)	343	1.54 (0.92, 2.57)	0.102	
	BOOST II AUS	16 (3.9)	407	22 (5.3)	414	0.77 (0.40, 1.47)	0.423	
	NeOProM	**102 (5.7)**	**1787**	**99 (5.4)**	**1832**	**1.06 (0.80, 1.39)**	**0.691**	
Yes	SUPPORT	0	17	3 (7.9)	38		***	
	COT	2 (7.1)	28	1 (4.3)	23	1.64 (0.16, 17.0)	0.677	
	BOOST II NZ	0	10	0	4	1.64 (0.16, 17.0)	0.677	
	BOOST II UK	2 (6.9)	29	1 (3.7)	27	1.86 (0.18, 19.4)	0.603	
	BOOST II AUS	0	38	3 (7.1)	42		***	
	NeOProM	**4 (3.3)**	**122**	**8 (6.0)**	**134**	**0.58 (0.21, 2.02)**	**0.452**	

Severe visual impairment at 18-24 months' age corrected for prematurity

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
SGA	SUPPORT	4 (0.9)	462	4 (0.8)	473	1.03 (0.26, 4.08)	0.966	0.759
SUPPORT	COT	5 (1.1)	459	2 (0.4)	465	2.53 (0.49, 12.99)	0.483	
Defined	BOOST II NZ	0	134	1 (0.7)	136		***	
No	BOOST II UK	11 (3.4)	321	11 (3.2)	342	1.07 (0.40, 2.87)	0.901	
	BOOST II AUS	3 (0.7)	413	2 (0.5)	416	1.51 (0.25, 8.96)	0.650	
	NeOProM	**23 (1.3)**	**1789**	**20 (1.1)**	**1832**	**1.16 (0.58, 2.29)**	**0.677**	
Yes	SUPPORT	1 (5.9)	17	2 (5.3)	38	1.11 (0.11, 11.5)	0.927	
	COT	0	28	1 (4.3)	23		***	
	BOOST II NZ	0	9	0	4		***	
	BOOST II UK	1 (3.6)	28	0	27		***	
	BOOST II AUS	0	38	0	43		***	
	NeOProM	**2 (1.7)**	**120**	**3 (2.2)**	**135**	**1.01 (0.22, 4.24)**	**0.982**	

Deafness at 18-24 months' age corrected for prematurity

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
SGA	SUPPORT	7 (1.5)	462	6 (1.3)	473	1.19 (0.40, 3.52)	0.748	0.784
SUPPORT	COT	17 (3.7)	459	11 (2.4)	466	1.57 (0.75, 3.29)	0.235	
Defined	BOOST II NZ	2 (1.5)	133	1 (0.7)	135	2.03 (0.19, 21.9)	0.560	
No	BOOST II UK	19 (5.9)	323	30 (8.8)	342	0.72 (0.42, 1.23)	0.224	
	BOOST II AUS	10 (2.5)	406	8 (2.0)	409	1.25 (0.50, 3.15)	0.629	
	NeOProM	**55 (3.1)**	**1783**	**56 (3.1)**	**1825**	**1.03 (0.72, 1.49)**	**0.859**	
Yes	SUPPORT	0	17	0	38		***	
	COT	1 (3.6)	28	1 (4.3)	23	0.82 (0.05, 12.4)	0.887	
	BOOST II NZ	0	9	0	4		***	
	BOOST II UK	3 (10.3)	29	2 (7.4)	27	1.40 (0.25, 7.73)	0.702	
	BOOST II AUS	1 (2.6)	38	1 (2.4)	42	1.11 (0.07, 17.1)	0.943	
	NeOProM	**5 (4.1)**	**121**	**4 (3.0)**	**134**	**1.18 (0.33, 4.20)**	**0.803**	

Positive Airway Pressure with endotracheal tube at 36 weeks

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
SGA	SUPPORT	42 (9.8)	429	35 (7.8)	449	1.25 (0.81, 1.93)	0.308	0.111
SUPPORT	COT	87 (15.5)	561	87 (15.5)	563	1.00 (0.76, 1.31)	0.985	
Defined	BOOST II NZ	2 (1.4)	142	3 (2.1)	142	0.68 (0.13, 3.62)	0.651	
No	BOOST II UK	11 (3.3)	337	10 (2.8)	360	1.18 (0.51, 2.75)	0.702	
	BOOST II AUS	9 (2.1)	435	11 (2.5)	444	0.75 (0.32, 1.76)	0.505	
	NeOProM	**151 (7.9)**	**1904**	**146 (7.5)**	**1958**	**1.04 (0.84, 1.29)**	**0.702**	
Yes	SUPPORT	5 (22.7)	22	9 (22.0)	41	1.02 (0.39, 2.68)	0.961	
	COT	10 (25.0)	40	12 (35.3)	34	0.71 (0.35, 1.43)	0.337	
	BOOST II NZ	1 (9.1)	11	1 (16.7)	6	0.55 (0.04, 7.25)	0.646	
	BOOST II UK	1 (3.1)	32	2 (6.1)	33	0.52 (0.05, 5.41)	0.325	
	BOOST II AUS	0	42	5 (10.0)	50		***	
	NeOProM	**17 (11.6)**	**147**	**29 (17.7)**	**164**	**0.67 (0.39, 1.14)**	**0.137**	

Positive Airway Pressure without endotracheal tube at 36 weeks

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
SGA	SUPPORT	100 (23.3)	429	148 (33.0)	449	0.73 (0.58, 0.91)	0.005	0.489
SUPPORT	COT	159 (28.3)	561	163 (29.0)	563	0.95 (0.80, 1.14)	0.594	
Defined	BOOST II NZ	32 (22.5)	142	43 (30.3)	142	0.76 (0.52, 1.12)	0.161	
No	BOOST II UK	56 (16.6)	337	63 (17.5)	360	0.98 (0.70, 1.36)	0.890	
	BOOST II AUS	82 (18.9)	435	75 (16.9)	444	1.08 (0.82, 1.42)	0.575	
	NeOProM	**429 (22.5)**	**1904**	**492 (25.1)**	**1958**	**0.89 (0.80, 1.00)**	**0.041**	
Yes	SUPPORT	11 (50.0)	22	18 (43.9)	41	1.05 (0.68, 1.62)	0.838	
	COT	18 (45.0)	40	15 (44.1)	34	1.02 (0.61, 1.70)	0.939	
	BOOST II NZ	6 (54.5)	11	3 (50.0)	6	1.09 (0.42, 2.86)	0.860	
	BOOST II UK	10 (31.3)	32	13 (39.4)	33	0.80 (0.43, 1.50)	0.488	
	BOOST II AUS	16 (38.1)	42	23 (46.0)	50	0.84 (0.53, 1.32)	0.446	
	NeOProM	**61 (41.5)**	**147**	**72 (43.9)**	**164**	**0.95 (0.73, 1.23)**	**0.699**	

Supplemental oxygen[#] without Positive Airway Pressure at 36 weeks

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
SGA	SUPPORT	48 (11.2)	429	57 (12.8)	447	0.85 (0.59, 1.24)	0.404	0.026
SUPPORT	COT	145 (39.4)	368	175 (47.9)	365	0.85 (0.73, 0.99)	0.043	
Defined	BOOST II NZ	21 (14.8)	142	34 (23.9)	142	0.62 (0.38, 1.01)	0.055	
No	BOOST II UK	121 (35.9)	337	138 (38.3)	360	0.91 (0.75, 1.10)	0.334	
	BOOST II AUS	95 (21.8)	435	121 (27.3)	444	0.81 (0.65, 1.01)	0.061	
	NeOProM	**430 (25.1)**	**1711**	**525 (29.9)**	**1758**	**0.84 (0.76, 0.93)**	**<.001**	
Yes	SUPPORT	2 (9.1)	22	7 (17.1)	41	0.28 (0.07, 1.13)	0.074	
	COT	11 (39.3)	28	17 (77.3)	22	0.51 (0.30, 0.85)	0.010	
	BOOST II NZ	2 (18.2)	11	3 (50.0)	6	0.36 (0.08, 1.61)	0.182	
	BOOST II UK	5 (15.6)	32	9 (27.3)	33	0.58 (0.22, 1.50)	0.260	
	BOOST II AUS	9 (21.4)	42	17 (34.0)	50	0.66 (0.34, 1.28)	0.221	
	NeOProM	**29 (21.5)**	**135**	**53 (34.9)**	**152**	**0.54 (0.37, 0.77)**	**<.001**	

[#] SUPPORT and UK trials used a physiologic test to determine need for supplemental oxygen whilst the other trials did not.

Discharged on home oxygen

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
SGA	SUPPORT	110 (21.9)	502	108 (21.2)	509	1.04 (0.82, 1.32)	0.747	0.491
SUPPORT	COT	72 (15.0)	479	64 (13.1)	489	1.15 (0.85, 1.55)	0.380	
Defined	BOOST II NZ	29 (18.2)	159	37 (22.7)	163	0.81 (0.52, 1.26)	0.345	
No	BOOST II UK	128 (37.6)	340	121 (33.8)	358	1.09 (0.90, 1.32)	0.361	
	BOOST II AUS	65 (12.8)	508	78 (15.2)	512	0.84 (0.62, 1.15)	0.270	
	NeOProM	**404 (20.3)**	**1988**	**408 (20.1)**	**2031**	**1.02 (0.91, 1.15)**	**0.732**	
Yes	SUPPORT	8 (44.4)	18	20 (50.0)	40	0.89 (0.52, 1.51)	0.664	
	COT	8 (28.6)	28	4 (17.4)	23	1.64 (0.57, 4.77)	0.361	
	BOOST II NZ	5 (45.5)	11	4 (57.1)	7	0.80 (0.32, 1.98)	0.623	
	BOOST II UK	13 (44.8)	29	17 (58.6)	29	0.76 (0.46, 1.27)	0.299	
	BOOST II AUS	17 (30.4)	56	13 (23.6)	55	1.31 (0.70, 2.45)	0.391	
	NeOProM	**51 (35.9)**	**142**	**58 (37.7)**	**154**	**0.96 (0.72, 1.28)**	**0.781**	

Readmission to hospital

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
SGA	SUPPORT	204 (44.3)	461	222 (46.3)	479	0.95 (0.82, 1.10)	0.476	0.801
SUPPORT	COT	206 (45.0)	458	190 (40.9)	464	1.10 (0.95, 1.27)	0.209	
Defined	BOOST II NZ	97 (75.2)	129	92 (69.2)	133	1.09 (0.94, 1.26)	0.244	
No	BOOST II UK	147 (63.6)	231	158 (66.7)	237	0.96 (0.84, 1.10)	0.536	
	BOOST II AUS	220 (60.3)	365	227 (60.2)	377	1.01 (0.90, 1.13)	0.888	
	NeOProM	**874 (53.2)**	**1644**	**889 (52.6)**	**1690**	**1.02 (0.96, 1.08)**	**0.605**	
Yes	SUPPORT	6 (35.3)	17	18 (47.4)	38	0.77 (0.37, 1.60)	0.480	
	COT	15 (53.6)	28	11 (50.0)	22	1.07 (0.62, 1.84)	0.803	
	BOOST II NZ	9 (90.0)	10	4 (100.0)	4	0.96 (0.66, 1.40)	0.542	
	BOOST II UK	15 (75.0)	20	18 (75.0)	24	1.00 (0.71, 1.41)	1.000	
	BOOST II AUS	23 (65.7)	35	27 (65.9)	41	1.00 (0.72, 1.38)	0.990	
	NeOProM	**68 (61.8)**	**110**	**78 (60.5)**	**129**	**0.94 (0.82, 1.09)**	**0.423**	

Patent ductus arteriosus (PDA) medically or surgically treated

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
SGA	SUPPORT	223 (37.5)	594	228 (38.4)	594	0.98 (0.85, 1.14)	0.830	0.386
SUPPORT	COT	304 (54.1)	562	311 (55.0)	565	0.96 (0.87, 1.07)	0.485	
Defined	BOOST II NZ	96 (60.4)	159	85 (52.1)	163	1.17 (0.97, 1.42)	0.110	
No	BOOST II UK	184 (41.8)	440	170 (38.4)	443	1.09 (0.93, 1.27)	0.283	
	BOOST II AUS	255 (49.9)	511	251 (49.1)	511	1.01 (0.89, 1.14)	0.926	
	NeOProM	**1062 (46.9)**	**2266**	**1045 (45.9)**	**2276**	**1.02 (0.96, 1.08)**	**0.560**	
Yes	SUPPORT	11 (26.8)	41	14 (27.5)	51	0.97 (0.49, 1.90)	0.922	
	COT	20 (50.0)	40	21 (61.8)	34	0.81 (0.54, 1.22)	0.309	
	BOOST II NZ	8 (72.7)	11	5 (71.4)	7	1.02 (0.56, 1.84)	0.952	
	BOOST II UK	14 (33.3)	42	16 (40.0)	40	0.83 (0.47, 1.48)	0.984	
	BOOST II AUS	24 (42.9)	56	26 (47.3)	55	0.90 (0.60, 1.36)	0.617	
	NeOProM	**77 (40.5)**	**190**	**82 (43.9)**	**187**	**0.89 (0.71, 1.11)**	**0.304**	

Patent ductus arteriosus (PDA) surgically treated

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
SGA	SUPPORT	70 (11.7)	600	64 (10.7)	597	1.11 (0.80, 1.55)	0.537	0.714
SUPPORT	COT	91 (16.2)	562	90 (15.9)	565	1.01 (0.78, 1.31)	0.934	
Defined	BOOST II NZ	11 (6.9)	159	10 (6.1)	163	1.11 (0.55, 2.26)	0.770	
No	BOOST II UK	57 (13.0)	440	42 (9.5)	443	1.35 (0.92, 1.99)	0.129	
	BOOST II AUS	35 (6.8)	511	21 (4.1)	509	2.38 (1.32, 4.29)	0.004	
	NeOProM	**264 (11.6)**	**2272**	**227 (10.0)**	**2277**	**1.17 (0.99, 1.38)**	**0.066**	
Yes	SUPPORT	3 (7.3)	41	4 (7.8)	51	0.93 (0.22, 3.93)	0.921	
	COT	6 (15.0)	40	3 (8.8)	34	1.70 (0.46, 6.29)	0.427	
	BOOST II NZ	1 (9.1)	11	1 (14.3)	7	0.64 (0.05, 8.61)	0.734	
	BOOST II UK	5 (11.9)	42	3 (7.5)	40	1.44 (0.40, 5.14)	0.576	
	BOOST II AUS	2 (3.6)	56	2 (3.6)	55	0.98 (0.14, 6.69)	0.985	
	NeOProM	**17 (8.9)**	**190**	**13 (7.0)**	**187**	**1.25 (0.63, 2.49)**	**0.522**	

Severe necrotizing enterocolitis (NEC)

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
SGA	SUPPORT	46 (7.7)	600	35 (5.9)	598	1.32 (0.85, 2.03)	0.213	0.184
SUPPORT	COT	47 (8.4)	562	35 (6.2)	565	1.36 (0.89, 2.08)	0.156	
Defined	BOOST II NZ	12 (7.5)	159	12 (7.4)	163	1.05 (0.49, 2.27)	0.901	
No	BOOST II UK	66 (14.9)	442	51 (11.6)	440	1.31 (0.93, 1.84)	0.122	
	BOOST II AUS	38 (7.4)	511	29 (5.7)	512	1.33 (0.83, 2.13)	0.235	
	NeOProM	**209 (9.2)**	**2274**	**162 (7.1)**	**2278**	**1.29 (1.06, 1.57)**	**0.012**	
Yes	SUPPORT	5 (12.2)	41	2 (3.9)	51	3.11 (0.63, 15.2)	0.162	
	COT	2 (5.0)	40	1 (2.9)	34	1.70 (0.16, 17.9)	0.659	
	BOOST II NZ	3 (27.3)	11	0	7		***	
	BOOST II UK	5 (11.9)	42	1 (2.5)	40	5.55 (0.63, 49.0)	0.123	
	BOOST II AUS	3 (5.4)	56	4 (7.3)	55	0.80 (0.22, 3.00)	0.746	
	NeOProM	**18 (9.5)**	**190**	**8 (4.3)**	**187**	**2.39 (1.09, 5.23)**	**0.029**	

Retinopathy of prematurity (ROP) treatment

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
SGA	SUPPORT	33 (7.1)	465	79 (16.6)	475	0.42 (0.28, 0.62)	<.001	0.494
SUPPORT	COT	60 (12.8)	470	60 (12.6)	478	0.95 (0.69, 1.30)	0.727	
Defined	BOOST II NZ	11 (7.5)	147	13 (9.0)	144	0.80 (0.38, 1.65)	0.544	
No	BOOST II UK	64 (17.9)	358	78 (21.3)	367	0.85 (0.63, 1.14)	0.281	
	BOOST II AUS	31 (7.0)	442	41 (9.2)	447	0.76 (0.49, 1.19)	0.231	
	NeOProM	**199 (10.6)**	**1882**	**271 (14.2)**	**1911**	**0.75 (0.63, 0.88)**	**<.001**	
Yes	SUPPORT	3 (17.6)	17	14 (35.9)	39	0.48 (0.16, 1.46)	0.198	
	COT	4 (13.3)	30	6 (24.0)	25	0.56 (0.18, 1.75)	0.316	
	BOOST II NZ	3 (27.3)	11	0	6		***	
	BOOST II UK	5 (14.3)	35	10 (29.4)	34	0.49 (0.19, 1.26)	0.138	
	BOOST II AUS	6 (13.3)	45	7 (14.0)	50	0.95 (0.35, 2.60)	0.925	
	NeOProM	**21 (15.2)**	**138**	**37 (24.0)**	**154**	**0.66 (0.41, 1.07)**	**0.090**	

Death by 18-24 months' age corrected for prematurity

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
SGA	SUPPORT	116 (19.6)	592	102 (17.2)	593	1.16 (0.91, 1.48)	0.237	0.203
SUPPORT	COT	85 (15.6)	545	77 (14.2)	543	1.10 (0.83, 1.45)	0.509	
Defined	BOOST II NZ	24 (15.1)	159	24 (14.7)	163	1.00 (0.60, 1.65)	0.989	
No	BOOST II UK	109 (24.7)	442	87 (19.6)	443	1.25 (0.97, 1.60)	0.082	
	BOOST II AUS	83 (16.4)	505	79 (15.6)	508	1.06 (0.80, 1.40)	0.697	
	NeOProM	**417 (18.6)**	**2243**	**369 (16.4)**	**2250**	**1.14 (1.00, 1.29)**	**0.047**	
Yes	SUPPORT	24 (58.5)	41	16 (29.1)	55	1.99 (1.22, 3.24)	0.006	
	COT	12 (30.0)	40	11 (32.4)	34	0.93 (0.47, 1.83)	0.827	
	BOOST II NZ	1 (9.1)	11	3 (42.9)	7	0.21 (0.03, 1.66)	0.139	
	BOOST II UK	13 (31.0)	42	11 (27.5)	40	1.13 (0.57, 2.21)	0.549	
	BOOST II AUS	17 (30.9)	55	8 (14.8)	54	1.77 (0.18, 17.7)	0.625	
	NeOProM	**67 (35.4)**	**189**	**49 (25.8)**	**190**	**1.42 (1.05, 1.92)**	**0.020**	

Death by 36 weeks' postmenstrual age

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
SGA	SUPPORT	96 (15.7)	613	82 (13.5)	607	1.18 (0.89, 1.57)	0.237	0.086
SUPPORT	COT	76 (13.5)	562	71 (12.6)	565	1.07 (0.79, 1.45)	0.646	
Defined	BOOST II NZ	17 (10.7)	159	21 (12.9)	163	0.84 (0.47, 1.50)	0.547	
No	BOOST II UK	98 (22.2)	442	79 (17.8)	443	1.23 (0.94, 1.61)	0.126	
	BOOST II AUS	76 (14.9)	511	68 (13.3)	512	1.12 (0.83, 1.51)	0.472	
	NeOProM	**363 (15.9)**	**2287**	**321 (14.0)**	**2290**	**1.13 (0.99, 1.30)**	**0.076**	
Yes	SUPPORT	18 (43.9)	41	12 (21.8)	55	2.00 (1.09, 3.67)	0.026	
	COT	10 (25.0)	40	9 (26.5)	34	0.94 (0.43, 2.05)	0.885	
	BOOST II NZ	0	11	1 (14.3)	7	0.22 (0.01, 4.80)	0.187	
	BOOST II UK	10 (23.8)	42	6 (15.0)	40	1.59 (0.64, 1.96)	0.298	
	BOOST II AUS	14 (25.0)	56	5 (9.1)	55	2.75 (1.06, 7.12)	0.022	
	NeOProM	**52 (27.4)**	**190**	**33 (17.3)**	**191**	**1.18 (1.12, 2.38)**	**0.010**	

Death by discharge

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
SGA	SUPPORT	107 (17.5)	613	93 (15.3)	607	1.16 (0.90, 1.51)	0.254	0.159
SUPPORT	COT	83 (14.8)	562	76 (13.5)	565	1.09 (0.82, 1.45)	0.531	
Defined	BOOST II NZ	20 (12.6)	159	22 (13.5)	163	0.94 (0.56, 1.60)	0.828	
No	BOOST II UK	102 (23.1)	442	85 (19.2)	443	1.19 (0.92, 1.54)	0.174	
	BOOST II AUS	83 (16.2)	511	75 (14.6)	512	1.11 (0.83, 1.48)	0.483	
	NeOProM	**395 (17.3)**	**2287**	**351 (15.3)**	**2290**	**1.13 (0.99, 1.29)**	**0.068**	
Yes	SUPPORT	23 (56.1)	41	14 (25.5)	55	2.18 (1.29, 3.70)	0.004	
	COT	12 (30.0)	40	11 (32.4)	34	0.93 (0.47, 1.83)	0.827	
	BOOST II NZ	1 (9.1)	11	2 (28.6)	7	0.32 (0.04, 2.89)	0.309	
	BOOST II UK	13 (31.0)	42	11 (27.5)	40	1.13 (0.57, 2.21)	0.456	
	BOOST II AUS	16 (28.6)	56	8 (14.5)	55	1.96 (0.92, 4.21)	0.493	
	NeOProM	**65 (34.2)**	**190**	**46 (24.1)**	**191**	**1.46 (1.07, 2.00)**	**0.020**	

Bayley-III language and/or cognitive <85

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
SGA	SUPPORT	212 (46.5)	456	227 (48.6)	467	0.95 (0.83, 1.10)	0.502	0.847
SUPPORT	COT	176 (39.4)	447	179 (39.3)	456	0.98 (0.84, 1.14)	0.804	
Defined	BOOST II NZ	29 (27.4)	106	36 (32.7)	110	0.82 (0.54, 1.24)	0.353	
No	BOOST II UK	75 (32.8)	229	69 (29.0)	238	1.17 (0.89, 1.54)	0.249	
	BOOST II AUS	108 (29.2)	370	101 (26.2)	385	1.11 (0.89, 1.39)	0.340	
	NeOProM	**600 (37.3)**	**1608**	**612 (37.0)**	**1656**	**1.00 (0.92, 1.09)**	**0.997**	
Yes	SUPPORT	9 (56.3)	16	25 (65.8)	38	0.86 (0.53, 1.41)	0.558	
	COT	13 (48.1)	27	11 (50.0)	22	0.96 (0.54, 1.71)	0.897	
	BOOST II NZ	5 (50.0)	10	1 (25.0)	4	2.00 (0.33, 12.2)	0.452	
	BOOST II UK	4 (25.0)	16	9 (42.9)	21	0.58 (0.22, 1.56)	0.282	
	BOOST II AUS	16 (44.4)	36	14 (34.1)	41	1.30 (0.74, 2.28)	0.357	
	NeOProM	**47 (44.8)**	**105**	**60 (47.6)**	**126**	**0.98 (0.74, 1.30)**	**0.880**	

Bayley-III cognitive <85

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
SGA	SUPPORT	99 (21.8)	455	113 (24.3)	465	0.91 (0.71, 1.17)	0.478	0.940
SUPPORT	COT	85 (19.1)	446	83 (18.2)	456	1.02 (0.78, 1.34)	0.874	
Defined	BOOST II NZ	17 (16.0)	106	12 (10.9)	110	0.69 (0.30, 1.58)	0.385	
No	BOOST II UK	49 (21.4)	229	45 (18.9)	238	1.20 (0.83, 1.75)	0.338	
	BOOST II AUS	55 (14.9)	370	45 (11.7)	385	1.25 (0.87, 1.78)	0.229	
	NeOProM	**305 (19.0)**	**1606**	**298 (18.0)**	**1654**	**1.04 (0.90, 1.21)**	**0.564**	
Yes	SUPPORT	6 (37.5)	16	19 (50.0)	38	0.73 (0.36, 1.48)	0.383	
	COT	6 (22.2)	27	3 (13.6)	22	1.63 (0.46, 5.78)	0.450	
	BOOST II NZ	3 (30.0)	10	0	4		***	
	BOOST II UK	4 (25.0)	16	4 (19.0)	21	1.31 (0.39, 4.46)	0.663	
	BOOST II AUS	9 (25.0)	36	7 (17.1)	41	1.46 (0.61, 3.53)	0.396	
	NeOProM	**28 (26.7)**	**105**	**33 (26.2)**	**126**	**1.10 (0.72, 1.67)**	**0.663**	

Bayley-III language <85

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
SGA	SUPPORT	194 (43.5)	446	202 (43.8)	461	0.98 (0.84, 1.14)	0.775	0.440
SUPPORT	COT	164 (36.9)	444	165 (36.8)	448	0.97 (0.83, 1.14)	0.745	
Defined	BOOST II NZ	29 (29.0)	100	31 (30.4)	102	0.90 (0.59, 1.39)	0.649	
No	BOOST II UK	68 (30.4)	224	50 (22.1)	226	1.39 (1.01, 1.91)	0.040	
	BOOST II AUS	96 (26.8)	358	90 (24.0)	375	1.12 (0.88, 1.42)	0.347	
	NeOProM	**551 (35.1)**	**1572**	**538 (33.4)**	**1612**	**1.03 (0.94, 1.13)**	**0.579**	
Yes	SUPPORT	9 (56.3)	16	23 (62.2)	37	0.92 (0.55, 1.52)	0.735	
	COT	12 (44.4)	27	11 (50.0)	22	0.89 (0.49, 1.61)	0.697	
	BOOST II NZ	4 (40.0)	10	1 (25.0)	4	1.60 (0.25, 10.3)	0.620	
	BOOST II UK	3 (18.8)	16	9 (42.9)	21	0.44 (0.14, 1.36)	0.153	
	BOOST II AUS	14 (40.0)	35	13 (33.3)	39	1.20 (0.66, 2.19)	0.552	
	NeOProM	**42 (40.4)**	**104**	**57 (46.3)**	**123**	**0.93 (0.69, 1.25)**	**0.619**	

Bayley-III language and/or cognitive <70

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
SGA	SUPPORT	66 (14.5)	456	78 (16.7)	467	0.83 (0.61, 1.14)	0.248	0.128
SUPPORT	COT	57 (13.4)	426	61 (13.9)	440	0.93 (0.67, 1.29)	0.656	
Defined	BOOST II NZ	5 (4.7)	106	3 (2.7)	110	1.78 (0.44, 7.29)	0.422	
No	BOOST II UK	33 (14.4)	229	25 (10.5)	238	1.40 (0.82, 2.39)	0.218	
	BOOST II AUS	34 (9.2)	370	32 (8.3)	385	1.07 (0.68, 1.67)	0.769	
	NeOProM	**195 (12.3)**	**1587**	**199 (12.1)**	**1640**	**0.98 (0.81, 1.18)**	**0.809**	
Yes	SUPPORT	6 (37.5)	16	17 (44.7)	38	0.82 (0.40, 1.69)	0.587	
	COT	3 (11.1)	27	4 (19.0)	21	0.58 (0.15, 2.33)	0.445	
	BOOST II NZ	2 (20.0)	10	1 (25.0)	4	0.80 (0.10, 6.54)	0.835	
	BOOST II UK	1 (6.3)	16	4 (19.0)	21	0.33 (0.04, 2.66)	0.297	
	BOOST II AUS	4 (11.1)	36	7 (17.1)	41	0.65 (0.21, 2.04)	0.462	
	NeOProM	**16 (15.2)**	**105**	**33 (26.4)**	**125**	**0.69 (0.40, 1.17)**	**0.166**	

Bayley-III cognitive <70

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
SGA	SUPPORT	29 (6.4)	455	31 (6.7)	465	0.92 (0.55, 1.54)	0.757	0.508
SUPPORT	COT	24 (5.6)	430	35 (8.0)	440	0.60 (0.35, 1.02)	0.057	
Defined	BOOST II NZ	4 (3.8)	106	1 (0.9)	110	4.14 (0.48, 35.7)	0.196	
No	BOOST II UK	22 (9.6)	229	12 (5.0)	238	1.97 (0.92, 4.25)	0.083	
	BOOST II AUS	15 (4.1)	370	10 (2.6)	385	1.56 (0.71, 3.43)	0.263	
	NeOProM	**94 (5.9)**	**1590**	**89 (5.4)**	**1638**	**1.05 (0.78, 1.41)**	**0.758**	
Yes	SUPPORT	5 (31.3)	16	7 (18.4)	38	1.68 (0.63, 4.52)	0.304	
	COT	0	27	2 (9.5)	21		***	
	BOOST II NZ	1 (10.0)	10	0	4		***	
	BOOST II UK	1 (6.3)	16	2 (9.5)	21	0.66 (0.07, 6.62)	0.721	
	BOOST II AUS	2 (5.6)	36	4 (9.8)	41	0.57 (0.11, 2.93)	0.500	
	NeOProM	**9 (8.6)**	**105**	**15 (12.0)**	**125**	**0.96 (0.43, 2.16)**	**0.925**	

Bayley-III language <70

		Lower Oxygen Saturation Target		Higher Oxygen Saturation Target		Adjusted* Relative Risk (95% CI)		
Subgroup	**Trial**	**n (%)**	**N**	**n (%)**	**N**	**Adjusted RR**	**p-value**	**interaction p-value**
SGA	SUPPORT	63 (14.1)	446	69 (15.0)	461	0.91 (0.66, 1.27)	0.585	0.080
SUPPORT	COT	54 (12.8)	423	53 (12.2)	433	1.02 (0.72, 1.44)	0.918	
Defined	BOOST II NZ	5 (5.0)	100	2 (2.0)	102	2.74 (0.54, 13.8)	0.222	
No	BOOST II UK	31 (13.8)	224	22 (9.7)	226	1.44 (0.80, 2.59)	0.222	
	BOOST II AUS	32 (8.9)	358	29 (7.7)	375	1.13 (0.72, 1.80)	0.590	
	NeOProM	**185 (11.9)**	**1551**	**175 (11.0)**	**1597**	**1.06 (0.87, 1.29)**	**0.574**	
Yes	SUPPORT	6 (37.5)	16	16 (43.2)	37	0.85 (0.41, 1.76)	0.656	
	COT	3 (11.5)	26	4 (19.0)	21	0.61 (0.15, 2.41)	0.477	
	BOOST II NZ	2 (20.0)	10	1 (25.0)	4	0.80 (0.10, 6.54)	0.835	
	BOOST II UK	1 (6.3)	16	4 (19.0)	21	0.33 (0.04, 2.66)	0.297	
	BOOST II AUS	3 (8.6)	35	6 (15.4)	39	0.56 (0.15, 2.06)	0.381	
	NeOProM	**15 (14.6)**	**103**	**31 (25.4)**	**122**	**0.68 (0.39, 1.18)**	**0.174**	

Sensitivity analyses

eTable 34. Primary and secondary outcomes using random effects models

Random effects models

Outcome	RR (95% CI)	p-value
Death or major disability using Bayley-III assessment only with CP (GMFCS>=2 or unknown)	1.03 (0.98, 1.10)	0.2370
Death or major disability using surrogate cognitive function test where Bayley-III unava	1.04 (0.98, 1.10)	0.2169
Death prior to 18-24 months corrected age	1.17 (1.03, 1.31)	0.0124
Major disability (as per protocol)^ by 18-24 months corrected age	1.00 (0.92, 1.09)	0.9737
Bayley III Developmental Assessment cognitive score <85 and/or language score <85	1.00 (0.91, 1.09)	0.9480
Major disability (using supplementary data) by 18-24 months corrected age	1.00 (0.93, 1.09)	0.9060
Cerebral Palsy with GMFCS>=2 (if known) or with GMFCS unknown	1.02 (0.79, 1.33)	0.8673
Deafness requiring hearing aids or worse	1.04 (0.73, 1.48)	0.8328
Severe visual impairment as defined by trialists	1.13 (0.64, 2.01)	0.6712
Death prior to 36 weeks postmenstrual age	1.18 (1.03, 1.34)	0.0160
Death prior to discharge	1.16 (1.03, 1.32)	0.0171
Patent ductus arteriosus (PDA) diagnosed by ultrasound and receiving medical or surgical	1.01 (0.95, 1.08)	0.6988
Patent ductus arteriosus (PDA) receiving surgical treatment	1.17 (0.99, 1.38)	0.0633
ROP	0.73 (0.62, 0.86)	0.0002
Necrotising enterocolitis (NEC) receiving surgery or leading to death?	1.33 (1.10, 1.61)	0.0031
Supplemental oxygen use at 36 weeks' postmenstrual age	0.82 (0.74, 0.90)	0.0001
One or more re-admission to hospital (medical or surgical) by 18-24 months	1.01 (0.95, 1.07)	0.7351
Bayley-III Language Composite Score	-0.04 (-1.11, 1.02)	0.9382
Bayley-III Cognition Composite Score	0.13 (-0.83, 1.09)	0.7878
PMA infant ceased use of positive airway pressure	0.09 (-0.32, 0.50)	0.6712
PMA infant ceased use of positive airway pressure	0.09 (-0.33, 0.50)	0.6865
PMA infant ceased use of supplemental oxygen with	-0.54 (-1.47, 0.38)	0.2502
PMA infant ceased home oxygen	-0.47 (-5.35, 4.41)	0.8521
Weight z-score at 36 weeks (postmenstrual age)	-0.05 (-0.16, 0.06)	0.3497
Weight z-score at discharge (corrected age)	-0.06 (-0.14, 0.02)	0.1303
Weight z-score at 18-24 months (corrected age)	0.01 (-0.08, 0.09)	0.8959

References

1. Kramer MS, Platt RW, Wen SW, et al. A new and improved population-based Canadian reference for birth weight for gestational age. *Pediatrics.* 2001;108(2):E35.
2. Askie LM, Brocklehurst P, Darlow BA, et al. NeOProM: Neonatal Oxygenation Prospective Meta-analysis Collaboration study protocol. *BMC Pediatrics.* 2011;11(6).
3. Australian New Zealand Clinical Trials Registry [Internet], NHMRC Clinical Trials Centre, University of Sydney, Australia. Identifier ACTRN12605000055606, Which oxygen saturation level should we use for very premature infants? A randomised controlled trial to investigate the effect of two slightly different oxygen levels on the health of very premature infants; 2005 Aug 1 [cited 2018 Mar 12]. Available from http://www.anzctr.org.au/ACTRN12605000055606.aspx.
4. Current Controlled Trials [Internet], London: BioMed Central. ISRCTN00842661, Which oxygen saturation level should we use for very premature infants? A randomised controlled trial. 2006 Mar 23 [cited 2018 Mar 12]. Available from: http://www.isrctn.com/ISRCTN00842661.
5. Australian New Zealand Clinical Trials Registry [Internet], NHMRC Clinical Trials Centre, University of Sydney, Australia. Identifier ACTRN12605000253606, A randomised phase III study to evaluate whether a lower versus a higher oxygen saturation target in infants of <28 weeks gestation is associated with a reduction in death or disability at 2 years of age; 2005 Sep 1 [cited 2018 Mar 12]. Available from http://www.anzctr.org.au/ACTRN12605000253606.aspx.
6. ClinicalTrials.gov [Internet], Bethesda (MD): National Library of Medicine (US). Identifier NCT00287391, Surfactant Positive Airway Pressure and Pulse Oximetry Trial (SUPPORT) 2005 Oct 3 [cited 2018 Mar 12]. Available from:https://clinicaltrials.gov/ct2/show/NCT00233324.
7. Current Controlled Trials [Internet], London: BioMed Central. ISRCTN62491227, Efficacy and safety of targeting lower arterial oxygen saturations to reduce oxygen toxicity and oxidative stress in very preterm infants: the Canadian Oxygen Trial. 2006 Aug 22 [cited 2018 Mar 12]; Available from: http://www.isrctn.com/ISRCTN62491227.
8. Walsh MC, Di Fiore JM, Martin RJ, Gantz M, Carlo WA, Finer N. Association of oxygen target and growth status with increased mortality in small for gestational age infants: further analysis of the Surfactant, Positive Pressure and Pulse Oximetry Randomized Trial. *JAMA Pediatrics.* 2016;170(3):292-294.
9. Alexander GR, Himes JH, Kaufman RB, Mor J, Kogan M. A United States national reference for fetal growth. *Obstet Gynecol.* 1996;87(2):163-168.