



Clinical trial results:

Safety during use of paediatric triple chamber bag formulas administered IV at a weight dependant dose during 5 consecutive days in paediatric patients up to 18 years requiring parenteral nutrition. A prospective, multicentre, non-comparative phase III study in therapeutic use.

Summary

EudraCT number	2007-001378-97
Trial protocol	FR BE
Global end of trial date	22 December 2008

Results information

Result version number	v1 (current)
This version publication date	01 December 2017
First version publication date	01 December 2017

Trial information

Trial identification

Sponsor protocol code	Ped3CB/P01/06/Mu.B
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Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT01304394
WHO universal trial number (UTN)	-

Notes:

Sponsors

Sponsor organisation name	Baxter Healthcare Corporation
Sponsor organisation address	1 Baxter Parkway, Deerfield, United States, 60015
Public contact	Clinical Trials Disclosure Group, Baxter Healthcare Corporation, joe_archer@Baxter.com
Scientific contact	Clinical Trials Disclosure Group, Baxter Healthcare Corporation, joe_archer@Baxter.com

Notes:

Paediatric regulatory details

Is trial part of an agreed paediatric investigation plan (PIP)	No
Does article 45 of REGULATION (EC) No 1901/2006 apply to this trial?	No
Does article 46 of REGULATION (EC) No 1901/2006 apply to this trial?	No

Notes:

Results analysis stage

Analysis stage	Final
Date of interim/final analysis	22 December 2008
Is this the analysis of the primary completion data?	Yes
Primary completion date	22 December 2008
Global end of trial reached?	Yes
Global end of trial date	22 December 2008
Was the trial ended prematurely?	Yes

Notes:

General information about the trial

Main objective of the trial:

To assess the performance safety of the Ped3CB in paediatric patients.

Protection of trial subjects:

Patients with a life expectancy < 6 days or with a severe illness with foreseeable intercurrent events that could jeopardize the patient's participation were not included in the study.

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	28 February 2008
Long term follow-up planned	No
Independent data monitoring committee (IDMC) involvement?	No

Notes:

Population of trial subjects

Subjects enrolled per country

Country: Number of subjects enrolled	Belgium: 43
Country: Number of subjects enrolled	France: 118
Worldwide total number of subjects	161
EEA total number of subjects	161

Notes:

Subjects enrolled per age group

In utero	0
Preterm newborn - gestational age < 37 wk	115
Newborns (0-27 days)	0
Infants and toddlers (28 days-23 months)	28
Children (2-11 years)	18
Adolescents (12-17 years)	0
Adults (18-64 years)	0
From 65 to 84 years	0
85 years and over	0

Subject disposition

Recruitment

Recruitment details: -

Pre-assignment

Screening details:

No randomization occurred for this study.

Period 1

Period 1 title	Overall (overall period)
Is this the baseline period?	Yes
Allocation method	Not applicable
Blinding used	Not blinded

Arms

Are arms mutually exclusive?	Yes
Arm title	300 mL

Arm description: -

Arm type	Active comparator
Investigational medicinal product name	Ped3CB
Investigational medicinal product code	
Other name	Numeta
Pharmaceutical forms	Solution for infusion
Routes of administration	Intravenous use

Dosage and administration details:

300 mL bag: Formula for preterm infants, containing 9.4 grams amino acids, 40 grams glucose, 7.5 grams lipids, and electrolytes. Non-activation of the lipid peel seal would result in a 240 mL bag containing 9.4 grams amino acid, 40 grams glucose, and electrolytes. The dose was adapted to patient age, calorie/protein estimated needs and oral/enteral intakes, according to current ESPEN-ESPGHAN nutritional guidelines.

Arm title	500 mL
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Arm description: -

Arm type	Active comparator
Investigational medicinal product name	Ped3CB
Investigational medicinal product code	
Other name	Numeta
Pharmaceutical forms	Solution for infusion
Routes of administration	Intravenous use

Dosage and administration details:

500 mL bag: Formula for term infants and toddlers <2 years of age, containing 13 grams amino acids, 77.5 grams glucose, 15.5 grams lipids, and electrolytes. Non-activation of the lipid peel seal would result in a 376 mL bag containing 13 grams amino acid, 77.5 grams glucose, and electrolytes. The dose was adapted to patient age, calorie/protein estimated needs and oral/enteral intakes, according to current ESPEN-ESPGHAN nutritional guidelines.

Arm title	1000 mL
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Arm description: -

Arm type	Active comparator
Investigational medicinal product name	Ped3CB
Investigational medicinal product code	
Other name	Numeta
Pharmaceutical forms	Solution for infusion
Routes of administration	Intravenous use

Dosage and administration details:

1000 mL bag: Formula for children and adolescents containing 23 grams amino acids, 191.5 grams glucose, 28.1 grams lipids, and electrolytes. Non-activation of the lipid peel seal would result in a 775 mL bag containing 23 grams amino acid, 191.5 grams glucose, and electrolytes. The dose was adapted to patient age, calorie/protein estimated needs and oral/enteral intakes, according to current ESPEN-ESPGHAN nutritional guidelines.

Number of subjects in period 1	300 mL	500 mL	1000 mL
Started	115	28	18
Exposed with at least 1 day of treatment	113	28	18
Completed	97	23	13
Not completed	18	5	5
Physician decision	2	4	3
Consent withdrawn by subject	1	-	-
Adverse event, non-fatal	3	-	1
Incurrent Illness	2	-	-
Enrolled but not treated	2	-	-
Protocol deviation	8	1	1

Baseline characteristics

Reporting groups

Reporting group title	300 mL
Reporting group description: -	
Reporting group title	500 mL
Reporting group description: -	
Reporting group title	1000 mL
Reporting group description: -	

Reporting group values	300 mL	500 mL	1000 mL
Number of subjects	115	28	18
Age categorical			
Units: Subjects			
In utero	0	0	0
Preterm newborn infants (gestational age < 37 wks)	115	0	0
Newborns (0-27 days)	0	0	0
Infants and toddlers (28 days-23 months)	0	28	0
Children (2-11 years)	0	0	18
Adolescents (12-17 years)	0	0	0
Adults (18-64 years)	0	0	0
From 65-84 years	0	0	0
85 years and over	0	0	0
Gender categorical			
Units: Subjects			
Female	47	8	11
Male	68	20	7

Reporting group values	Total		
Number of subjects	161		
Age categorical			
Units: Subjects			
In utero	0		
Preterm newborn infants (gestational age < 37 wks)	115		
Newborns (0-27 days)	0		
Infants and toddlers (28 days-23 months)	28		
Children (2-11 years)	18		
Adolescents (12-17 years)	0		
Adults (18-64 years)	0		
From 65-84 years	0		
85 years and over	0		
Gender categorical			
Units: Subjects			
Female	66		
Male	95		

End points

End points reporting groups

Reporting group title	300 mL
Reporting group description: -	
Reporting group title	500 mL
Reporting group description: -	
Reporting group title	1000 mL
Reporting group description: -	

Primary: Systolic Blood Pressure by Visit

End point title	Systolic Blood Pressure by Visit ^[1]
End point description: First recording in the morning, and a final evaluation will take place after the last infusion (including early/premature terminations before Day 5).	
End point type	Primary
End point timeframe: Day 0 (Baseline) to Day 5	

Notes:

[1] - No statistical analyses have been specified for this primary end point. It is expected there is at least one statistical analysis for each primary end point.

Justification: Descriptive statistics were done, no inferential statistical analyses were performed.

End point values	300 mL	500 mL	1000 mL	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	112	25	18	
Units: mmHg				
arithmetic mean (standard deviation)				
Day 0 (Baseline)	60.5 (± 9.2)	76.4 (± 13.8)	106.4 (± 12.0)	
Day 1	61.8 (± 8.7)	77.7 (± 15.4)	109.3 (± 9.8)	
Day 2	60.8 (± 8.1)	78.5 (± 14.9)	111.4 (± 15.7)	
Day 3	61.7 (± 9.9)	80.0 (± 15.3)	106.0 (± 15.9)	
Day 4	61.4 (± 9.0)	81.4 (± 16.1)	104.2 (± 12.5)	
Day 5	63.2 (± 11.1)	86.9 (± 14.1)	110.0 (± 13.6)	
Day 5 and Premature Terminations	62.9 (± 11.5)	85.4 (± 13.4)	108.3 (± 13.8)	

Statistical analyses

No statistical analyses for this end point

Primary: Diastolic Blood Pressure by Visit

End point title	Diastolic Blood Pressure by Visit ^[2]
End point description: First recording in the morning, and a final evaluation will take place after the last infusion (including early/premature terminations before Day 5).	
End point type	Primary

End point timeframe:

Day 0 (Baseline) to Day 5

Notes:

[2] - No statistical analyses have been specified for this primary end point. It is expected there is at least one statistical analysis for each primary end point.

Justification: Descriptive statistics were done, no inferential statistical analyses were performed.

End point values	300 mL	500 mL	1000 mL	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	112	25	18	
Units: mmHg				
arithmetic mean (standard deviation)				
Day 0 (Baseline)	36.1 (± 7.8)	43.5 (± 10.8)	64.6 (± 9.6)	
Day 1	36.8 (± 8.8)	44.5 (± 11.9)	63.3 (± 9.1)	
Day 2	35.7 (± 7.8)	43.0 (± 11.1)	67.3 (± 12.1)	
Day 3	36.6 (± 8.3)	44.5 (± 9.2)	62.6 (± 10.9)	
Day 4	35.8 (± 8.5)	44.2 (± 9.1)	64.9 (± 8.7)	
Day 5	36.6 (± 9.7)	46.7 (± 9.8)	62.0 (± 10.2)	
Day 5 and Premature Terminations	36.6 (± 10.0)	46.8 (± 9.1)	63.5 (± 10.7)	

Statistical analyses

No statistical analyses for this end point

Primary: Heart Rate by Visit

End point title Heart Rate by Visit^[3]

End point description:

First recording in the morning, and a final evaluation will take place after the last infusion (including early/premature terminations before Day 5).

End point type Primary

End point timeframe:

Day 0 (Baseline) to Day 5

Notes:

[3] - No statistical analyses have been specified for this primary end point. It is expected there is at least one statistical analysis for each primary end point.

Justification: Descriptive statistics were done, no inferential statistical analyses were performed.

End point values	300 mL	500 mL	1000 mL	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	113	28	18	
Units: bpm				
arithmetic mean (standard deviation)				
Day 0 (Baseline)	147.5 (± 15.9)	142.0 (± 22.9)	107.7 (± 27.8)	
Day 1	151.9 (± 14.5)	142.1 (± 23.0)	104.3 (± 29.1)	
Day 2	152.4 (± 14.8)	142.4 (± 21.5)	108.0 (± 25.3)	
Day 3	153.5 (± 14.1)	148.4 (± 16.9)	105.8 (± 27.9)	
Day 4	153.1 (± 13.9)	143.1 (± 17.4)	112.7 (± 33.2)	
Day 5	155.9 (± 13.6)	146.5 (± 15.9)	101.9 (± 32.4)	
Day 5 and Premature Terminations	155.5 (± 14.3)	148.5 (± 19.2)	101.6 (± 30.4)	

Statistical analyses

No statistical analyses for this end point

Primary: Temperature by Visit

End point title	Temperature by Visit ^[4]
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End point description:

First recording in the morning, and a final evaluation will take place after the last infusion (including early/premature terminations before Day 5).

End point type	Primary
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End point timeframe:

Day 0 (Baseline) to Day 5

Notes:

[4] - No statistical analyses have been specified for this primary end point. It is expected there is at least one statistical analysis for each primary end point.

Justification: Descriptive statistics were done, no inferential statistical analyses were performed.

End point values	300 mL	500 mL	1000 mL	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	112	28	18	
Units: Celsius temperature				
arithmetic mean (standard deviation)				
Day 0 (Baseline)	36.7 (± 0.4)	36.9 (± 0.5)	37.2 (± 0.9)	
Day 1	36.8 (± 0.4)	36.8 (± 0.5)	37.0 (± 0.9)	
Day 2	36.8 (± 0.4)	36.9 (± 0.6)	37.1 (± 0.8)	
Day 3	36.7 (± 0.4)	37.0 (± 0.4)	36.9 (± 0.6)	
Day 4	36.8 (± 0.4)	36.9 (± 0.4)	37.0 (± 1.0)	
Day 5	36.8 (± 0.5)	37.0 (± 0.3)	36.9 (± 1.1)	
Day 5 and Premature Terminations	36.8 (± 0.4)	36.9 (± 0.3)	37.0 (± 1.0)	

Statistical analyses

No statistical analyses for this end point

Primary: Number of Patients with Adverse Events (AE) and Serious Adverse Events (SAE)

End point title	Number of Patients with Adverse Events (AE) and Serious Adverse Events (SAE) ^[5]
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End point description:

End point type	Primary
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End point timeframe:

Day 0 (Baseline) through Day 5, or through Day 10 (optional for preterm newborn infants), with an additional 2 day follow-up period after the last infusion.

Notes:

[5] - No statistical analyses have been specified for this primary end point. It is expected there is at least one statistical analysis for each primary end point.

Justification: Descriptive statistics were done, no inferential statistical analyses were performed.

End point values	300 mL	500 mL	1000 mL	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	113	28	18	
Units: Patients				
AE	77	18	10	
SAE	4	0	1	

Statistical analyses

No statistical analyses for this end point

Primary: Total Number of Adverse Events (AE) and Serious Adverse Events (SAE) in Study

End point title	Total Number of Adverse Events (AE) and Serious Adverse Events (SAE) in Study ^[6]
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End point description:

End point type	Primary
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End point timeframe:

Day 0 (Baseline) through Day 5, or through Day 10 (optional for preterm newborn infants), with an additional 2 day follow-up period after the last infusion.

Notes:

[6] - No statistical analyses have been specified for this primary end point. It is expected there is at least one statistical analysis for each primary end point.

Justification: Descriptive statistics were done, no inferential statistical analyses were performed.

End point values	300 mL	500 mL	1000 mL	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	113	28	18	
Units: Events				
AE	167	23	17	
SAE	6	0	2	

Statistical analyses

No statistical analyses for this end point

Primary: Change from Baseline of Laboratory Parameters in Preterm Newborn Infant Group at Day 5

End point title	Change from Baseline of Laboratory Parameters in Preterm Newborn Infant Group at Day 5 ^{[7][8]}
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End point description:

* One patient had a phosphates value at Baseline at non-physiological level, so included parameter

analysis without this patient.

End point type	Primary
End point timeframe:	
Day 0 (Baseline) and Day 5	

Notes:

[7] - No statistical analyses have been specified for this primary end point. It is expected there is at least one statistical analysis for each primary end point.

Justification: Descriptive statistics were done, no inferential statistical analyses were performed.

[8] - The end point is not reporting statistics for all the arms in the baseline period. It is expected all the baseline period arms will be reported on when providing values for an end point on the baseline period.

Justification: Descriptive statistics were done, no inferential statistical analyses were performed.

End point values	300 mL			
Subject group type	Reporting group			
Number of subjects analysed	113			
Units: mmol/L				
arithmetic mean (standard deviation)				
Triglycerides (n=85)	0.16 (± 1.17)			
Urea (n=93)	-0.87 (± 6.97)			
Glucose (n=90)	0.18 (± 2.32)			
Sodium (n=94)	-2.32 (± 4.24)			
Potassium (n=92)	0.51 (± 0.98)			
Calcium (n=92)	0.16 (± 0.31)			
Phosphates (n=92)	-0.31 (± 2.28)			
Phosphates Excluding One Patient (n=91)*	-0.07 (± 0.45)			
Bicarbonates (n=86)	4.70 (± 4.63)			

Statistical analyses

No statistical analyses for this end point

Primary: Change from Baseline of Laboratory Parameters in Preterm Newborn Infant Group at Day 10 or End of Treatment

End point title	Change from Baseline of Laboratory Parameters in Preterm Newborn Infant Group at Day 10 or End of Treatment ^{[9][10]}
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End point description:

* One patient had a phosphates value at Baseline at non-physiological level, so included parameter analysis without this patient.

End point type	Primary
End point timeframe:	
Day 0 (Baseline) and Day 10 or End of Treatment	

Notes:

[9] - No statistical analyses have been specified for this primary end point. It is expected there is at least one statistical analysis for each primary end point.

Justification: Descriptive statistics were done, no inferential statistical analyses were performed.

[10] - The end point is not reporting statistics for all the arms in the baseline period. It is expected all the baseline period arms will be reported on when providing values for an end point on the baseline period.

Justification: Descriptive statistics were done, no inferential statistical analyses were performed.

End point values	300 mL			
Subject group type	Reporting group			
Number of subjects analysed	113			
Units: mmol/L				
arithmetic mean (standard deviation)				
Triglycerides (n=68)	-0.10 (± 1.22)			
Urea (n=77)	-3.94 (± 6.44)			
Glucose (n=77)	-0.59 (± 1.67)			
Sodium (n=82)	-2.97 (± 4.6)			
Potassium (n=80)	0.44 (± 0.88)			
Calcium (n=82)	0.11 (± 0.29)			
Phosphates (n=77)	0.04 (± 0.53)			
Phosphates Excluding One Patient (n=77)*	0.04 (± 0.53)			
Bicarbonates (n=73)	3.85 (± 4.65)			

Statistical analyses

No statistical analyses for this end point

Primary: Change from Baseline of Laboratory Parameters in Preterm Newborn Infant Group at End of Treatment

End point title	Change from Baseline of Laboratory Parameters in Preterm Newborn Infant Group at End of Treatment ^{[11][12]}
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End point description:

* One patient had a phosphates value at Baseline at non-physiological level, so included parameter analysis without this patient.

End point type	Primary
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End point timeframe:

Day 0 (Baseline) and End of Treatment (including Premature Terminations and Completers)

Notes:

[11] - No statistical analyses have been specified for this primary end point. It is expected there is at least one statistical analysis for each primary end point.

Justification: Descriptive statistics were done, no inferential statistical analyses were performed.

[12] - The end point is not reporting statistics for all the arms in the baseline period. It is expected all the baseline period arms will be reported on when providing values for an end point on the baseline period.

Justification: Descriptive statistics were done, no inferential statistical analyses were performed.

End point values	300 mL			
Subject group type	Reporting group			
Number of subjects analysed	113			
Units: mmol/L				
arithmetic mean (standard deviation)				
Triglycerides (n=91)	-0.12 (± 1.34)			
Urea (n=103)	-3.14 (± 6.80)			
Glucose (n=103)	-0.48 (± 2.12)			
Sodium (n=110)	-2.72 (± 4.72)			
Potassium (n=108)	0.44 (± 1.00)			
Calcium (n=106)	0.12 (± 0.30)			
Phosphates (n=102)	-0.17 (± 2.20)			

Phosphates Excluding One Patient (n=101)*	0.04 (± 0.51)			
Bicarbonates (n=99)	3.75 (± 4.45)			

Statistical analyses

No statistical analyses for this end point

Secondary: Mean Daily Parenteral Intakes coming from Infused Ped3CB Bags

End point title	Mean Daily Parenteral Intakes coming from Infused Ped3CB Bags
End point description: Safety population was used in this analysis. For the 3 treatment groups 300 mL, 500 mL, 1000 mL, the following are the mean body weight (grams) and mean total bag volume infused (mL/kg/day), respectively: 300 mL=1451 grams and 89.5 mL/kg/day; 500 mL= 3400 grams and 77 mL/kg/day; 1000 mL=31304 grams and 34 mL/kg/day. Also, the following is the ESPEN-ESPGHAN recommended ranges for the following parameters by treatment group: 300 mL bag=Total Bag volume infused:60-180 mL/kg/day, Amino acids:1.5-4 g/kg/day, Glucose:6-12 g/kg/day(up to 18), Lipids:1.25-3(up to 4) g/kg/day; 500 mL bag=Total Bag volume infused:80-150 mL/kg/day, Amino acids:1-2.5 g/kg/day, Glucose:8-16(up to 18) g/kg/day, Lipids:0.5-3(up to 4) g/kg/day; 1000 mL bag=Total Bag volume infused:50-100 mL/kg/day, Amino acids:1-2(up to 3) g/kg/day, Glucose:3-16 g/kg/day, Lipids:0.5-2(up to 3) g/kg/day.	
End point type	Secondary
End point timeframe: Day 1 to Day 5	

End point values	300 mL	500 mL	1000 mL	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	113	28	18	
Units: g/kg/day				
arithmetic mean (standard deviation)				
Nitrogen	0.42 (± 0.11)	0.31 (± 0.09)	0.12 (± 0.07)	
Amino Acids	2.83 (± 0.76)	2.10 (± 0.61)	0.81 (± 0.45)	
Glucose	12.07 (± 3.24)	12.51 (± 3.63)	6.70 (± 3.77)	
Lipids	2.15 (± 0.66)	2.05 (± 0.99)	0.86 (± 0.67)	

Statistical analyses

No statistical analyses for this end point

Secondary: Mean Daily Parenteral Intakes (Energy) coming from Infused Ped3CB Bags

End point title	Mean Daily Parenteral Intakes (Energy) coming from Infused Ped3CB Bags
End point description: Safety population was used in this analysis. This analysis focuses on Energy parameters of parenteral intakes. For the 3 treatment groups 300 mL, 500 mL, 1000 mL, the following are the mean body weight	

(grams) and mean total bag volume infused (mL/kg/day), respectively: 300 mL=1451 grams and 89.5 mL/kg/day; 500 mL= 3400 grams and 77 mL/kg/day); 1000 mL=31304 grams and 34 mL/kg/day. Also, the following is the ESPEN-ESPGHAN recommended ranges for the Total Calories by treatment group: 300 mL: 100 -120 (calculated: 43-94; up to 128) kcal/kg/day, 500 mL: 90 -100 (calculated: 41-104; up to 122) kcal/kg/day, 1000 mL: 30 -90 (calculated: 21-90; up to 102) kcal/kg/day.

End point type	Secondary
End point timeframe:	
Day 1 to Day 5	

End point values	300 mL	500 mL	1000 mL	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	113	28	18	
Units: kcal/kg/day				
arithmetic mean (standard deviation)				
Total calories	81.2 (± 21.5)	78.9 (± 21.6)	38.6 (± 23.1)	
Non-protein calories	69.8 (± 18.5)	70.5 (± 19.5)	35.4 (± 21.3)	
Glucose calories	48.29 (± 12.96)	50.03 (± 14.51)	26.80 (± 15.09)	
Lipid calories	21.51 (± 6.62)	20.46 (± 9.87)	8.55 (± 6.68)	

Statistical analyses

No statistical analyses for this end point

Secondary: Mean Daily Parenteral Intakes (Electrolytes) coming from Infused Ped3CB Bags

End point title	Mean Daily Parenteral Intakes (Electrolytes) coming from Infused Ped3CB Bags
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End point description:

This analysis focuses on Electrolyte parameters of parenteral intakes. For the 3 treatment groups 300 mL, 500 mL, 1000 mL, the following are the mean body weight (grams) and mean total bag volume infused (mL/kg/day), respectively: 300 mL=1451 grams and 89.5 mL/kg/day; 500 mL= 3400 grams and 77 mL/kg/day); 1000 mL=31304 grams and 34 mL/kg/day. The following is the ESPEN-ESPGHAN recommended ranges for the following parameters by treatment group: 300 mL= Sodium: 0-5(up to 7) mmol/kg/day, Potassium: 0-5 mmol/kg/day, Magnesium: not provided, Calcium: 1-4 mmol/kg/day, Phosphate: 0.75-3 mmol/kg/day, Chloride: not provided; 500 mL= Sodium: 2-3 mmol/kg/day, Potassium: 1-3 mmol/kg/day, Magnesium: 0.1-0.2 mmol/kg/day, Calcium: 0.2-0.8 mmol/kg/day, Phosphate: 0.2-0.5 mmol/kg/day, Chloride: not provided; 1000 mL= Sodium: 1-3 mmol/kg/day, Potassium: 1-3 mmol/kg/day, Magnesium: 0.1 mmol/kg/day, Calcium: 0.2 mmol/kg/day, Phosphate: 0.2 mmol/kg/day, Chloride: not provided.

End point type	Secondary
End point timeframe:	
Day 1 to Day 5	

End point values	300 mL	500 mL	1000 mL	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	113	28	18	
Units: mmol/kg/day				
arithmetic mean (standard deviation)				
Sodium	1.93 (± 0.52)	1.84 (± 0.53)	1.57 (± 0.88)	
Potassium	1.87 (± 0.50)	1.84 (± 0.53)	1.12 (± 0.63)	
Magnesium	0.390 (± 0.105)	0.258 (± 0.074)	0.091 (± 0.052)	
Calcium	1.14 (± 0.31)	0.50 (± 0.15)	0.13 (± 0.08)	
Phosphate	1.13 (± 0.30)	0.67 (± 0.18)	0.33 (± 0.20)	
Chloride	2.80 (± 0.75)	2.26 (± 0.65)	1.50 (± 0.84)	

Statistical analyses

No statistical analyses for this end point

Secondary: Maximum Daily Parenteral Intakes coming from Infused Ped3CB Bags

End point title	Maximum Daily Parenteral Intakes coming from Infused Ped3CB Bags
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End point description:

Safety population was used in this analysis. For the 3 treatment groups 300 mL, 500 mL, 1000 mL, the following are the mean body weight (grams) and mean total bag volume infused (mL/kg/day), respectively: 300 mL=1389 grams and 114.3 mL/kg/day; 500 mL= 3338 grams and 95.3 mL/kg/day); 1000 mL=31037 grams and 39.3 mL/kg/day. Also, the following is the ESPEN-ESPGHAN recommended ranges for the following parameters by treatment group: 300 mL bag=Total Bag volume infused:60-180 mL/kg/day, Amino acids:1.5-4 g/kg/day, Glucose:6-12 g/kg/day(up to 18), Lipids:1.25-3(up to 4) g/kg/day; 500 mL bag=Total Bag volume infused:80-150 mL/kg/day, Amino acids:1-2.5 g/kg/day, Glucose:8-16(up to 18) g/kg/day, Lipids:0.5-3(up to 4) g/kg/day; 1000 mL bag=Total Bag volume infused:50-100 mL/kg/day, Amino acids:1-2(up to 3) g/kg/day, Glucose:3-16 g/kg/day, Lipids:0.5-2(up to 3) g/kg/day.

End point type	Secondary
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End point timeframe:

Day 1 - Day 5

End point values	300 mL	500 mL	1000 mL	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	113	28	18	
Units: g/kg/day				
arithmetic mean (standard deviation)				
Nitrogen	0.54 (± 0.13)	0.37 (± 0.10)	0.14 (± 0.07)	
Amino Acids	3.62 (± 0.87)	2.56 (± 0.68)	0.93 (± 0.49)	
Glucose	15.40 (± 3.70)	15.26 (± 4.07)	7.73 (± 4.08)	
Lipids	2.74 (± 0.83)	2.67 (± 1.20)	1.00 (± 0.73)	

Statistical analyses

Secondary: Maximum Daily Parenteral Intakes (Energy) coming from Infused Ped3CB Bags

End point title	Maximum Daily Parenteral Intakes (Energy) coming from Infused Ped3CB Bags
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End point description:

Safety population was used in this analysis. This analysis focuses on Energy parameters of parenteral intakes. For the 3 treatment groups 300 mL, 500 mL, 1000 mL, the following are the mean body weight (grams) and mean total bag volume infused (mL/kg/day), respectively: 300 mL=1389 grams and 114.3 mL/kg/day; 500 mL= 3338 grams and 95.3 mL/kg/day); 1000 mL=31037 grams and 39.3 mL/kg/day. Also, the following is the ESPEN-ESPGHAN recommended ranges for the Total Calories by treatment group: 300 mL: 100 -120 (calculated: 43-94; up to 128) kcal/kg/day, 500 mL: 90 -100 (calculated: 41-104; up to 122) kcal/kg/day, 1000 mL: 30 -90 (calculated: 21-90; up to 102) kcal/kg/day.

End point type	Secondary
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End point timeframe:

Day 1 to Day 5

End point values	300 mL	500 mL	1000 mL	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	113	28	18	
Units: kcal/kg/day				
arithmetic mean (standard deviation)				
Total calories	103.7 (± 23.6)	97.9 (± 26)	44.6 (± 25.1)	
Non-protein calories	89 (± 20.3)	87.7 (± 23.6)	40.9 (± 23.1)	
Glucose calories	61.59 (± 14.79)	61.03 (± 16.28)	30.91 (± 16.31)	
Lipid calories	27.43 (± 8.29)	26.65 (± 11.98)	10 (± 7.32)	

Statistical analyses

No statistical analyses for this end point

Secondary: Maximum Daily Parenteral Intakes (Electrolytes) coming from Infused Ped3CB Bags

End point title	Maximum Daily Parenteral Intakes (Electrolytes) coming from Infused Ped3CB Bags
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End point description:

This analysis focuses on Electrolyte parameters of parenteral intakes (Safety Population). For the 3 treatment groups 300 mL, 500 mL, 1000 mL, the following are the mean body weight (grams) and mean total bag volume infused (mL/kg/day), respectively: 300 mL=1389 grams and 114.3 mL/kg/day; 500 mL= 3338 grams and 95.3 mL/kg/day); 1000 mL=31037 grams and 39.3 mL/kg/day. The following is the ESPEN-ESPGHAN recommended ranges for the following parameters by treatment group: 300 mL= Sodium: 0-5(up to 7) mmol/kg/day, Potassium: 0-5 mmol/kg/day, Magnesium: not provided, Calcium: 1-4 mmol/kg/day, Phosphate: 0.75-3 mmol/kg/day, Chloride: not provided; 500 mL= Sodium: 2-3 mmol/kg/day, Potassium: 1-3 mmol/kg/day, Magnesium: 0.1-0.2 mmol/kg/day, Calcium: 0.2-0.8 mmol/kg/day, Phosphate: 0.2-0.5 mmol/kg/day, Chloride: not provided; 1000 mL= Sodium: 1-3 mmol/kg/day, Potassium: 1-3 mmol/kg/day, Magnesium: 0.1 mmol/kg/day, Calcium: 0.2 mmol/kg/day, Phosphate: 0.2 mmol/kg/day, Chloride: not provided.

End point type	Secondary
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End point timeframe:

Day 1 to Day 5

End point values	300 mL	500 mL	1000 mL	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	113	28	18	
Units: mmol/kg/day				
arithmetic mean (standard deviation)				
Sodium	2.46 (± 0.58)	2.24 (± 0.60)	1.82 (± 0.96)	
Potassium	2.39 (± 0.57)	2.24 (± 0.60)	1.29 (± 0.68)	
Magnesium	0.501 (± 0.121)	0.315 (± 0.084)	0.104 (± 0.057)	
Calcium	1.46 (± 0.35)	0.61 (± 0.16)	0.15 (± 0.08)	
Phosphate	1.45 (± 0.33)	0.84 (± 0.22)	0.39 (± 0.22)	
Chloride	3.58 (± 0.86)	2.76 (± 0.73)	1.74 (± 0.92)	

Statistical analyses

No statistical analyses for this end point

Secondary: Mean Daily Parenteral Intakes Including Additions

End point title	Mean Daily Parenteral Intakes Including Additions
End point description:	
Safety population was used in this analysis. For the 3 treatment groups 300 mL, 500 mL, 1000 mL, the following are the mean body weight (grams) and mean total bag volume infused (mL/kg/day), respectively: 300 mL=1451 grams and 104 mL/kg/day; 500 mL= 3400 grams and 88 mL/kg/day); 1000 mL=31304 grams and 49.5 mL/kg/day. Also, the following is the ESPEN-ESPGHAN recommended ranges for the following parameters by treatment group: 300 mL bag=Total Bag volume infused:60-180 mL/kg/day, Amino acids:1.5-4 g/kg/day, Glucose:6-12 g/kg/day(up to 18), Lipids:1.25-3(up to 4) g/kg/day; 500 mL bag=Total Bag volume infused:80-150 mL/kg/day, Amino acids:1-2.5 g/kg/day, Glucose:8-16(up to 18) g/kg/day, Lipids:0.5-3(up to 4) g/kg/day; 1000 mL bag=Total Bag volume infused:50-100 mL/kg/day, Amino acids:1-2(up to 3) g/kg/day, Glucose:3-16 g/kg/day, Lipids:0.5-2(up to 3) g/kg/day.	
End point type	Secondary
End point timeframe:	
Day 1 to Day 5	

End point values	300 mL	500 mL	1000 mL	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	113	28	18	
Units: g/kg/d				
arithmetic mean (standard deviation)				
Nitrogen	0.42 (± 0.11)	0.33 (± 0.09)	0.18 (± 0.07)	
Amino acids	2.84 (± 0.75)	2.26 (± 0.63)	1.16 (± 0.48)	
Glucose	12.20 (± 3.19)	13.71 (± 4.12)	9.94 (± 3.81)	
Lipids	2.17 (± 0.63)	2.24 (± 0.88)	1.26 (± 0.79)	

Statistical analyses

No statistical analyses for this end point

Secondary: Mean Daily Parenteral Intakes (Energy) Including Additions

End point title	Mean Daily Parenteral Intakes (Energy) Including Additions
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End point description:

Safety population was used in this analysis. This analysis focuses on Energy parameters of parenteral intakes. For the 3 treatment groups 300 mL, 500 mL, 1000 mL, the following are the mean body weight (grams) and mean total bag volume infused (mL/kg/day), respectively: 300 mL=1451 grams and 104 mL/kg/day; 500 mL= 3400 grams and 88 mL/kg/day); 1000 mL=31304 grams and 49.5 mL/kg/day. Also, the following is the ESPEN-ESPGHAN recommended ranges for the Total Calories by treatment group: 300 mL: 100 -120 (calculated: 43-94; up to 128) kcal/kg/day, 500 mL: 90 -100 (calculated: 41-104; up to 122) kcal/kg/day, 1000 mL: 30 -90 (calculated: 21-90; up to 102) kcal/kg/day.

End point type	Secondary
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End point timeframe:

Day 1 to Day 5

End point values	300 mL	500 mL	1000 mL	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	113	28	18	
Units: kcal/kg/d				
arithmetic mean (standard deviation)				
Total parenteral energy	81.9 (± 21.2)	86.3 (± 23.3)	57 (± 24.5)	
Non-protein energy	70.5 (± 18.2)	77.3 (± 21)	52.3 (± 22.6)	
Glucose calories	48.81 (± 12.76)	54.84 (± 16.48)	39.76 (± 15.26)	
Lipid calories	21.72 (± 6.27)	22.43 (± 8.83)	12.59 (± 7.91)	
Lipid calories/non-protein calories	30.6 (± 3.8)	28.9 (± 8.9)	21.6 (± 10.1)	
Lipid calories/total calories	26.4 (± 3.3)	26 (± 8.1)	19.9 (± 9.3)	

Statistical analyses

No statistical analyses for this end point

Secondary: Mean Daily Parenteral Intakes (Electrolytes) Including Additions

End point title	Mean Daily Parenteral Intakes (Electrolytes) Including Additions
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End point description:

This analysis focuses on Energy parameters of parenteral intakes (Safety Population). For the 3 treatment groups 300 mL, 500 mL, 1000 mL, the following are the mean body weight (grams) and mean total bag volume infused (mL/kg/day), respectively: 300 mL=1451 grams and 104 mL/kg/day; 500 mL= 3400 grams and 88 mL/kg/day); 1000 mL=31304 grams and 49.5 mL/kg/day. The following

is the ESPEN-ESPGHAN recommended ranges for the following parameters by treatment group: 300 mL= Sodium: 0-5(up to 7) mmol/kg/day, Potassium: 0-5 mmol/kg/day, Magnesium: not provided, Calcium: 1-4 mmol/kg/day, Phosphate: 0.75-3 mmol/kg/day, Chloride: not provided; 500 mL= Sodium: 2-3 mmol/kg/day, Potassium: 1-3 mmol/kg/day, Magnesium: 0.1-0.2 mmol/kg/day, Calcium: 0.2-0.8 mmol/kg/day, Phosphate: 0.2-0.5 mmol/kg/day, Chloride: not provided; 1000 mL= Sodium: 1-3 mmol/kg/day, Potassium: 1-3 mmol/kg/day, Magnesium: 0.1 mmol/kg/day, Calcium: 0.2 mmol/kg/day, Phosphate: 0.2 mmol/kg/day, Chloride: not provided.

End point type	Secondary
End point timeframe:	
Day 1 to Day 5	

End point values	300 mL	500 mL	1000 mL	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	113	28	18	
Units: mmol/kg/d				
arithmetic mean (standard deviation)				
Sodium	3.45 (± 2.21)	2.79 (± 1.26)	5.31 (± 6.71)	
Potassium	1.99 (± 0.60)	2.18 (± 0.71)	3.36 (± 5.19)	
Magnesium	0.391 (± 0.105)	0.279 (± 0.079)	0.152 (± 0.095)	
Calcium	1.18 (± 0.31)	0.60 (± 0.20)	0.23 (± 0.11)	
Phosphate	1.18 (± 0.41)	0.80 (± 0.27)	0.51 (± 0.23)	
Chloride	4.38 (± 2.23)	3.25 (± 1.26)	5.24 (± 5.38)	

Statistical analyses

No statistical analyses for this end point

Secondary: Body Weight Evolution (and Difference) between Baseline and End of Treatment

End point title	Body Weight Evolution (and Difference) between Baseline and End of Treatment
End point description:	
Includes measure at each visit and the difference between visits. ITT population was used.	
End point type	Secondary
End point timeframe:	
Day 0 (Baseline) to Day 5, or up to Day 10 (optional)	

End point values	300 mL	500 mL	1000 mL	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	113	27	18	
Units: Grams				
arithmetic mean (standard deviation)				
Baseline	1373 (± 501)	3325 (± 1261)	31022 (± 14774)	

End of Treatment	1595 (\pm 523)	3483 (\pm 1232)	31560 (\pm 15041)	
Difference between Baseline and End of Treatment	221 (\pm 131)	163 (\pm 203)	538 (\pm 774)	

Statistical analyses

No statistical analyses for this end point

Secondary: Bag Ease of Use by Hospital Department and Overall

End point title	Bag Ease of Use by Hospital Department and Overall
End point description:	
Two hospital departments (Pharmacy and Service) were given a questionnaire that required a "Yes" or "No" response for questions related to handling and ease of use. This data is displayed to show percentage of staff that answered "Yes." High percentages were desirable for all categories except for Premature Peel Seal Activation which would require a low percentage score since premature peeling is not desirable.	
End point type	Secondary
End point timeframe:	
Day 1 to Day 5	

End point values	300 mL	500 mL	1000 mL	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	113	28	18	
Units: Percentage of "yes" responses				
number (not applicable)				
Overpouch easy to open (Pharmacy)	98.70	75.86	83.33	
Overpouch easy to open (Service)	42.37	73.91	84.78	
Overpouch easy to open (Overall)	70.17	74.31	84.38	
Bag easy to remove from overpouch (Pharmacy)	98.48	72.41	94.44	
Bag easy to remove from overpouch (Service)	44.28	72.17	88.04	
Bag easy to remove from overpouch (Overall)	71.03	72.22	89.84	
Premature peel seal activation (Pharmacy)	0	0	0	
Premature peel seal activation (Service)	1.71	1.74	0	
Premature peel seal activation (Overall)	0.86	1.39	0	
2-in-1: easy selective activation (Pharmacy)	100	100	0	
2-in-1: easy selective activation (Service)	81.25	86.36	65	
2-in-1: easy selective activation (Overall)	93.18	88.46	65	
3-in-1: easy activation (Pharmacy)	96.90	76	95	
3-in-1: easy activation (Service)	80.22	89.36	90.41	
3-in-1: easy activation (Overall)	88.22	86.55	92.04	
Quick homogeneity obtained (Pharmacy)	98.91	92.86	97.50	

Quick homogeneity obtained (Service)	90.73	95.45	97.85	
Quick homogeneity obtained (Overall)	94.85	94.93	97.74	

Statistical analyses

No statistical analyses for this end point

Secondary: Performance of Handling PED3CB bags versus Usual Practice measured by Mean Visual Analog Scale (VAS)

End point title	Performance of Handling PED3CB bags versus Usual Practice measured by Mean Visual Analog Scale (VAS)
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End point description:

Hospital staff evaluated the performance of using PED3CB bags versus their usual practice. Responses were recorded on a form using a Visual Analog Scale (VAS) by ticking a 10-cm straight line. The ticks were converted in centimeters, measured from the left, where 0 cm is on the left and 10 cm on the right. Pictograms at both ends of this line indicated that ticking toward the left side would show a worse performance of the Ped3CB bag than their usual practice, and ticking toward the right side would show a better performance. The categories list the usual practice. The following abbreviations are used in describing usual practice: IB=Individual Bottles; WCB=Ward-Compounded Bags; RTU=RTU compounded bags; TP=Tailored Premixes; Rx=prescription.

End point type	Secondary
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End point timeframe:

Day 0 (Baseline) to Day 5

End point values	300 mL	500 mL	1000 mL	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	113	28	18	
Units: centimeters				
arithmetic mean (standard deviation)				
IB: bag manipulation (n=0,0,20)	0 (± 0)	0 (± 0)	8 (± 1.3)	
IB: Rx to infusion time (n=0,0,18)	0 (± 0)	0 (± 0)	9 (± 0.8)	
WCB: bag manipulation (n=460,29,45)	8.1 (± 1.1)	7.6 (± 1.8)	8 (± 0.6)	
WCB: Rx to infusion time (n=373,19,46)	7.4 (± 1.6)	7.4 (± 1.6)	7.6 (± 0.7)	
RTU: bag manipulation (n=241,58,40)	6 (± 2.6)	7.5 (± 2)	7.1 (± 1.7)	
RTU: Rx to infusion time (n=240,58,40)	7.6 (± 1.9)	8.1 (± 1.7)	7.9 (± 1.2)	
TP: bag manipulation (n=223,57,29)	6.2 (± 2.2)	6.5 (± 2.1)	8.5 (± 0.9)	
TP: Rx to infusion time (n=223,57,27)	7 (± 1.7)	7 (± 2.1)	8.4 (± 0.7)	

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information

Timeframe for reporting adverse events:

Day 0 (Baseline) through Day 5, or through Day 10 (optional for preterm newborn infants), with an additional 2 day follow-up period after the last infusion.

Assessment type	Systematic
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Dictionary used

Dictionary name	MedDRA
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Dictionary version	11
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Reporting groups

Reporting group title	300 mL
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Reporting group description: -

Reporting group title	500 mL
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Reporting group description: -

Reporting group title	1000 mL
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Reporting group description: -

Serious adverse events	300 mL	500 mL	1000 mL
Total subjects affected by serious adverse events			
subjects affected / exposed	4 / 113 (3.54%)	0 / 28 (0.00%)	1 / 18 (5.56%)
number of deaths (all causes)	1	0	0
number of deaths resulting from adverse events	1	0	0
Gastrointestinal disorders			
Gastrointestinal necrosis			
subjects affected / exposed	0 / 113 (0.00%)	0 / 28 (0.00%)	1 / 18 (5.56%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Respiratory, thoracic and mediastinal disorders			
Emphysema			
subjects affected / exposed	1 / 113 (0.88%)	0 / 28 (0.00%)	0 / 18 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 1	0 / 0	0 / 0
Pneumothorax			
subjects affected / exposed	1 / 113 (0.88%)	0 / 28 (0.00%)	0 / 18 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 1	0 / 0	0 / 0
Infections and infestations			

Herpes simplex			
subjects affected / exposed	1 / 113 (0.88%)	0 / 28 (0.00%)	0 / 18 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Septic shock			
subjects affected / exposed	1 / 113 (0.88%)	0 / 28 (0.00%)	0 / 18 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 1	0 / 0	0 / 0
Staphylococcal sepsis			
subjects affected / exposed	1 / 113 (0.88%)	0 / 28 (0.00%)	0 / 18 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Catheter sepsis			
subjects affected / exposed	1 / 113 (0.88%)	0 / 28 (0.00%)	0 / 18 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Abdominal sepsis			
subjects affected / exposed	0 / 113 (0.00%)	0 / 28 (0.00%)	1 / 18 (5.56%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0

Frequency threshold for reporting non-serious adverse events: 0 %

Non-serious adverse events	300 mL	500 mL	1000 mL
Total subjects affected by non-serious adverse events			
subjects affected / exposed	77 / 113 (68.14%)	18 / 28 (64.29%)	10 / 18 (55.56%)
Vascular disorders			
Haemorrhage			
subjects affected / exposed	1 / 113 (0.88%)	0 / 28 (0.00%)	0 / 18 (0.00%)
occurrences (all)	1	0	0
Hypotension			
subjects affected / exposed	1 / 113 (0.88%)	0 / 28 (0.00%)	0 / 18 (0.00%)
occurrences (all)	1	0	0
Pregnancy, puerperium and perinatal conditions			

Jaundice neonatal subjects affected / exposed occurrences (all)	1 / 113 (0.88%) 1	0 / 28 (0.00%) 0	0 / 18 (0.00%) 0
General disorders and administration site conditions			
Catheter site erythema subjects affected / exposed occurrences (all)	2 / 113 (1.77%) 2	0 / 28 (0.00%) 0	0 / 18 (0.00%) 0
Catheter site inflammation subjects affected / exposed occurrences (all)	1 / 113 (0.88%) 1	1 / 28 (3.57%) 1	0 / 18 (0.00%) 0
Oedema subjects affected / exposed occurrences (all)	2 / 113 (1.77%) 2	1 / 28 (3.57%) 1	0 / 18 (0.00%) 0
Puncture site reaction subjects affected / exposed occurrences (all)	0 / 113 (0.00%) 0	1 / 28 (3.57%) 1	0 / 18 (0.00%) 0
Pyrexia subjects affected / exposed occurrences (all)	0 / 113 (0.00%) 0	2 / 28 (7.14%) 2	4 / 18 (22.22%) 4
Reproductive system and breast disorders			
Testicular disorder subjects affected / exposed occurrences (all)	1 / 113 (0.88%) 1	0 / 28 (0.00%) 0	0 / 18 (0.00%) 0
Respiratory, thoracic and mediastinal disorders			
Bronchopulmonary dysplasia subjects affected / exposed occurrences (all)	2 / 113 (1.77%) 2	0 / 28 (0.00%) 0	0 / 18 (0.00%) 0
Emphysema subjects affected / exposed occurrences (all)	1 / 113 (0.88%) 1	0 / 28 (0.00%) 0	0 / 18 (0.00%) 0
Laryngeal oedema subjects affected / exposed occurrences (all)	2 / 113 (1.77%) 2	1 / 28 (3.57%) 1	0 / 18 (0.00%) 0
Lung disorder			

subjects affected / exposed	0 / 113 (0.00%)	1 / 28 (3.57%)	0 / 18 (0.00%)
occurrences (all)	0	1	0
Pneumothorax			
subjects affected / exposed	3 / 113 (2.65%)	0 / 28 (0.00%)	0 / 18 (0.00%)
occurrences (all)	3	0	0
Pulmonary hypertension			
subjects affected / exposed	1 / 113 (0.88%)	0 / 28 (0.00%)	0 / 18 (0.00%)
occurrences (all)	1	0	0
Pulmonary oedema			
subjects affected / exposed	3 / 113 (2.65%)	0 / 28 (0.00%)	0 / 18 (0.00%)
occurrences (all)	3	0	0
Respiratory acidosis			
subjects affected / exposed	3 / 113 (2.65%)	0 / 28 (0.00%)	0 / 18 (0.00%)
occurrences (all)	3	0	0
Respiratory disorder			
subjects affected / exposed	0 / 113 (0.00%)	1 / 28 (3.57%)	0 / 18 (0.00%)
occurrences (all)	0	1	0
Respiratory failure			
subjects affected / exposed	1 / 113 (0.88%)	0 / 28 (0.00%)	0 / 18 (0.00%)
occurrences (all)	1	0	0
Upper respiratory tract inflammation			
subjects affected / exposed	1 / 113 (0.88%)	0 / 28 (0.00%)	0 / 18 (0.00%)
occurrences (all)	1	0	0
Investigations			
C-reactive protein increased			
subjects affected / exposed	0 / 113 (0.00%)	1 / 28 (3.57%)	0 / 18 (0.00%)
occurrences (all)	0	1	0
Platelet count decreased			
subjects affected / exposed	1 / 113 (0.88%)	0 / 28 (0.00%)	0 / 18 (0.00%)
occurrences (all)	1	0	0
Injury, poisoning and procedural complications			
Tracheal obstruction			
subjects affected / exposed	1 / 113 (0.88%)	0 / 28 (0.00%)	0 / 18 (0.00%)
occurrences (all)	1	0	0
Congenital, familial and genetic disorders			

Patent ductus arteriosus subjects affected / exposed occurrences (all)	7 / 113 (6.19%) 7	0 / 28 (0.00%) 0	0 / 18 (0.00%) 0
Ventricular septal defect subjects affected / exposed occurrences (all)	1 / 113 (0.88%) 1	0 / 28 (0.00%) 0	0 / 18 (0.00%) 0
Cardiac disorders			
Bradycardia subjects affected / exposed occurrences (all)	0 / 113 (0.00%) 0	1 / 28 (3.57%) 1	1 / 18 (5.56%) 1
Cardiac failure subjects affected / exposed occurrences (all)	0 / 113 (0.00%) 0	1 / 28 (3.57%) 1	0 / 18 (0.00%) 0
Nervous system disorders			
Sedation subjects affected / exposed occurrences (all)	0 / 113 (0.00%) 0	1 / 28 (3.57%) 1	0 / 18 (0.00%) 0
Blood and lymphatic system disorders			
Anaemia subjects affected / exposed occurrences (all)	11 / 113 (9.73%) 12	0 / 28 (0.00%) 0	0 / 18 (0.00%) 0
Thrombocytopenia subjects affected / exposed occurrences (all)	3 / 113 (2.65%) 3	0 / 28 (0.00%) 0	0 / 18 (0.00%) 0
Eye disorders			
Abnormal sensation in eye subjects affected / exposed occurrences (all)	0 / 113 (0.00%) 0	0 / 28 (0.00%) 0	1 / 18 (5.56%) 1
Conjunctivitis subjects affected / exposed occurrences (all)	4 / 113 (3.54%) 4	1 / 28 (3.57%) 1	0 / 18 (0.00%) 0
Gastrointestinal disorders			
Abdominal pain subjects affected / exposed occurrences (all)	0 / 113 (0.00%) 0	0 / 28 (0.00%) 0	1 / 18 (5.56%) 1
Constipation			

subjects affected / exposed	7 / 113 (6.19%)	0 / 28 (0.00%)	2 / 18 (11.11%)
occurrences (all)	8	0	2
Diarrhoea			
subjects affected / exposed	0 / 113 (0.00%)	1 / 28 (3.57%)	0 / 18 (0.00%)
occurrences (all)	0	1	0
Enteritis			
subjects affected / exposed	0 / 113 (0.00%)	1 / 28 (3.57%)	0 / 18 (0.00%)
occurrences (all)	0	1	0
Enterocolitis			
subjects affected / exposed	1 / 113 (0.88%)	0 / 28 (0.00%)	0 / 18 (0.00%)
occurrences (all)	1	0	0
Gastric haemorrhage			
subjects affected / exposed	1 / 113 (0.88%)	0 / 28 (0.00%)	0 / 18 (0.00%)
occurrences (all)	1	0	0
Gastrointestinal necrosis			
subjects affected / exposed	0 / 113 (0.00%)	0 / 28 (0.00%)	1 / 18 (5.56%)
occurrences (all)	0	0	1
Haematemesis			
subjects affected / exposed	0 / 113 (0.00%)	1 / 28 (3.57%)	0 / 18 (0.00%)
occurrences (all)	0	1	0
Necrotising colitis			
subjects affected / exposed	1 / 113 (0.88%)	0 / 28 (0.00%)	0 / 18 (0.00%)
occurrences (all)	1	0	0
Pneumoperitoneum			
subjects affected / exposed	1 / 113 (0.88%)	0 / 28 (0.00%)	0 / 18 (0.00%)
occurrences (all)	1	0	0
Subileus			
subjects affected / exposed	0 / 113 (0.00%)	1 / 28 (3.57%)	0 / 18 (0.00%)
occurrences (all)	0	1	0
Vomiting			
subjects affected / exposed	0 / 113 (0.00%)	0 / 28 (0.00%)	3 / 18 (16.67%)
occurrences (all)	0	0	4
Hepatobiliary disorders			
Cholestasis			
subjects affected / exposed	1 / 113 (0.88%)	0 / 28 (0.00%)	0 / 18 (0.00%)
occurrences (all)	1	0	0

Skin and subcutaneous tissue disorders			
Erythema			
subjects affected / exposed	0 / 113 (0.00%)	1 / 28 (3.57%)	0 / 18 (0.00%)
occurrences (all)	0	1	0
Petechiae			
subjects affected / exposed	0 / 113 (0.00%)	0 / 28 (0.00%)	1 / 18 (5.56%)
occurrences (all)	0	0	1
Rash erythematous			
subjects affected / exposed	0 / 113 (0.00%)	0 / 28 (0.00%)	1 / 18 (5.56%)
occurrences (all)	0	0	1
Renal and urinary disorders			
Anuria			
subjects affected / exposed	1 / 113 (0.88%)	0 / 28 (0.00%)	0 / 18 (0.00%)
occurrences (all)	1	0	0
Azotaemia			
subjects affected / exposed	1 / 113 (0.88%)	0 / 28 (0.00%)	0 / 18 (0.00%)
occurrences (all)	1	0	0
Oliguria			
subjects affected / exposed	2 / 113 (1.77%)	0 / 28 (0.00%)	0 / 18 (0.00%)
occurrences (all)	2	0	0
Renal failure			
subjects affected / exposed	4 / 113 (3.54%)	0 / 28 (0.00%)	0 / 18 (0.00%)
occurrences (all)	4	0	0
Infections and infestations			
Abdominal sepsis			
subjects affected / exposed	0 / 113 (0.00%)	0 / 28 (0.00%)	1 / 18 (5.56%)
occurrences (all)	0	0	1
Candidiasis			
subjects affected / exposed	2 / 113 (1.77%)	0 / 28 (0.00%)	0 / 18 (0.00%)
occurrences (all)	2	0	0
Candiduria			
subjects affected / exposed	1 / 113 (0.88%)	0 / 28 (0.00%)	0 / 18 (0.00%)
occurrences (all)	1	0	0
Catheter sepsis			
subjects affected / exposed	1 / 113 (0.88%)	0 / 28 (0.00%)	0 / 18 (0.00%)
occurrences (all)	1	0	0
Fungal infection			

subjects affected / exposed	2 / 113 (1.77%)	0 / 28 (0.00%)	0 / 18 (0.00%)
occurrences (all)	2	0	0
Gastroenteritis astroviral			
subjects affected / exposed	1 / 113 (0.88%)	0 / 28 (0.00%)	0 / 18 (0.00%)
occurrences (all)	1	0	0
Herpes simplex			
subjects affected / exposed	1 / 113 (0.88%)	0 / 28 (0.00%)	0 / 18 (0.00%)
occurrences (all)	1	0	0
Herpes virus infection			
subjects affected / exposed	1 / 113 (0.88%)	0 / 28 (0.00%)	0 / 18 (0.00%)
occurrences (all)	1	0	0
Nosocomial infection			
subjects affected / exposed	5 / 113 (4.42%)	0 / 28 (0.00%)	0 / 18 (0.00%)
occurrences (all)	5	0	0
Rhinitis			
subjects affected / exposed	2 / 113 (1.77%)	0 / 28 (0.00%)	0 / 18 (0.00%)
occurrences (all)	3	0	0
Sepsis			
subjects affected / exposed	9 / 113 (7.96%)	0 / 28 (0.00%)	0 / 18 (0.00%)
occurrences (all)	10	0	0
Septic shock			
subjects affected / exposed	1 / 113 (0.88%)	0 / 28 (0.00%)	0 / 18 (0.00%)
occurrences (all)	1	0	0
Staphylococcal infection			
subjects affected / exposed	1 / 113 (0.88%)	0 / 28 (0.00%)	0 / 18 (0.00%)
occurrences (all)	1	0	0
Staphylococcal sepsis			
subjects affected / exposed	8 / 113 (7.08%)	0 / 28 (0.00%)	0 / 18 (0.00%)
occurrences (all)	8	0	0
Metabolism and nutrition disorders			
Hypercalcaemia			
subjects affected / exposed	4 / 113 (3.54%)	0 / 28 (0.00%)	0 / 18 (0.00%)
occurrences (all)	4	0	0
Hypercholesterolaemia			
subjects affected / exposed	1 / 113 (0.88%)	0 / 28 (0.00%)	0 / 18 (0.00%)
occurrences (all)	1	0	0

Hyperglycaemia			
subjects affected / exposed	12 / 113 (10.62%)	2 / 28 (7.14%)	0 / 18 (0.00%)
occurrences (all)	13	2	0
Hyperkalaemia			
subjects affected / exposed	3 / 113 (2.65%)	0 / 28 (0.00%)	1 / 18 (5.56%)
occurrences (all)	3	0	1
Hyperlipidaemia			
subjects affected / exposed	0 / 113 (0.00%)	1 / 28 (3.57%)	0 / 18 (0.00%)
occurrences (all)	0	1	0
Hypernatraemia			
subjects affected / exposed	2 / 113 (1.77%)	0 / 28 (0.00%)	0 / 18 (0.00%)
occurrences (all)	2	0	0
Hyperphosphataemia			
subjects affected / exposed	4 / 113 (3.54%)	0 / 28 (0.00%)	0 / 18 (0.00%)
occurrences (all)	4	0	0
Hypertriglyceridaemia			
subjects affected / exposed	8 / 113 (7.08%)	1 / 28 (3.57%)	0 / 18 (0.00%)
occurrences (all)	9	1	0
Hypoglycaemia			
subjects affected / exposed	2 / 113 (1.77%)	0 / 28 (0.00%)	0 / 18 (0.00%)
occurrences (all)	2	0	0
Hyponatraemia			
subjects affected / exposed	9 / 113 (7.96%)	0 / 28 (0.00%)	0 / 18 (0.00%)
occurrences (all)	9	0	0
Hypophosphataemia			
subjects affected / exposed	5 / 113 (4.42%)	0 / 28 (0.00%)	0 / 18 (0.00%)
occurrences (all)	5	0	0
Metabolic acidosis			
subjects affected / exposed	1 / 113 (0.88%)	0 / 28 (0.00%)	0 / 18 (0.00%)
occurrences (all)	1	0	0
Sodium retention			
subjects affected / exposed	2 / 113 (1.77%)	1 / 28 (3.57%)	0 / 18 (0.00%)
occurrences (all)	2	1	0

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

Date	Amendment
28 February 2008	-Body weight to be collected on a daily basis. -pH measurement is not part of the usual department practices and will be replaced by bicarbonate measurement which is routinely collected in preterm newborn infants.

Notes:

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

None reported