# Immune effects of acidic and neutral oligosaccharides in the nutrition of preterm infants: CARROT study

Submission date Recruitment status [X] Prospectively registered 08/02/2007 No longer recruiting [X] Protocol Statistical analysis plan Registration date Overall study status 08/02/2007 Completed [X] Results [ ] Individual participant data Last Edited Condition category 06/05/2014 Nutritional, Metabolic, Endocrine

#### Plain English summary of protocol

Not provided at time of registration

#### Contact information

#### Type(s)

Scientific

#### Contact name

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#### Contact details

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#### Additional identifiers

Protocol serial number NTR884

# Study information

Scientific Title

#### Acronym

**CARROT** study

#### Study objectives

Acidic and neutral oligosaccharides supplemented enteral nutrition has a positive effect on infectious morbidity, modulation of the immune response, postnatal adaptation of the gut, feeding tolerance and short-term outcome in Very Low Birth Weight (VLBW) infants. 2006 literature review on http://www.ncbi.nlm.nih.gov/pubmed/16677741.

#### Ethics approval required

Old ethics approval format

#### Ethics approval(s)

Medical Ethics Committee VU Medical Centre, 15/02/2007

#### Study design

Randomised placebo-controlled factorial double-blinded trial

#### Primary study design

Interventional

#### Study type(s)

Treatment

#### Health condition(s) or problem(s) studied

Prebiotics, gastrointestinal tract, preterm infants, immune effects

#### Interventions

Enteral supplementation of acidic and neutral oligosaccharides (20%/80% mixture) in a maximum dose of 1.5 g/kg/day during the first month of life.

#### Intervention Type

Supplement

#### Phase

**Not Specified** 

#### Drug/device/biological/vaccine name(s)

Enteral supplementation of acidic and neutral oligosaccharides

#### Primary outcome(s)

- 1. The effect of acidic and neutral oligosaccharides supplemented enteral feeding on infectious morbidity
- 2. The incidence of serious infections, using the previously described criteria for serious infections in preterm infants at high risk for serious infections, are prospectively documented from birth until discharge home

#### Key secondary outcome(s))

The effect of acidic and neutral oligosaccharides supplemented enteral nutrition on feeding tolerance, short-term outcome, postnatal adaptation of the gut and modulation of the immune response

#### Completion date

01/04/2010

## **Eligibility**

#### Key inclusion criteria

Infants born with a gestational age of less than 32 weeks and/or a birthweight of less than 1500g

#### Participant type(s)

**Patient** 

#### Healthy volunteers allowed

No

#### Age group

Neonate

#### Sex

**Not Specified** 

#### Key exclusion criteria

- 1. Severe congenital disorders, like cardiac disorders, syndromal disorders, immunodeficiency disorders
- 2. Congenital disorders of the gastrointestinal tract

#### Date of first enrolment

01/04/2007

#### Date of final enrolment

01/04/2010

#### Locations

#### Countries of recruitment

Netherlands

# Study participating centre VU University Medical Centre

Amsterdam Netherlands 1007 MB

# Sponsor information

#### Organisation

VU University Medical Centre (VUMC) (Netherlands)

#### **ROR**

https://ror.org/00q6h8f30

# Funder(s)

#### Funder type

Industry

#### **Funder Name**

Numico Research B.V. (Netherlands)

### **Results and Publications**

Individual participant data (IPD) sharing plan

#### IPD sharing plan summary

Not provided at time of registration

#### **Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	01/03/2010		Yes	No
Results article	external supplementation results	01/01/2011		Yes	No
Results article	results	08/08/2013		Yes	No
Protocol article	protocol	23/10/2008		Yes	No