

# Wireless wearable belt for neonatal monitoring

No registrations found.

<b>Ethical review</b>	Not applicable
<b>Status</b>	Pending
<b>Health condition type</b>	-
<b>Study type</b>	Observational non invasive

## Summary

### ID

NL-OMON28282

### Source

NTR

### Brief title

TBA

### Health condition

Prematurity

## Sponsors and support

**Primary sponsor:** Máxima Medical Center

**Source(s) of monetary or material Support:** Bambi Medical B.V.

## Intervention

## Outcome measures

### Primary outcome

Transepidermal water loss

### Secondary outcome

Neonatal skin condition score

## Study description

### Background summary

In sick or prematurely born neonates, cardiorespiratory monitoring is routinely performed using adhesive electrodes. Especially in neonatal intensive care units (NICUs), where all infants require monitoring, alternative monitoring methods are desired to replace such skin unfriendly adhesive electrodes, attached to hindering wires. In this study, the skin friendliness of one such alternatives is compared to skin friendliness of routine monitoring with adhesive electrodes.

### Study objective

A wearable, non-adhesive wireless belt is skin friendlier compared to routine adhesive electrodes meant for cardiorespiratory monitoring in neonates.

### Study design

Study duration is 10 days. Primary and secondary outcome measures are determined daily.

### Intervention

Wearing of wearable belt for 10 days

## Contacts

### Public

Máxima Medical Center  
Deedee Kommers

040 888 93 50

### Scientific

Máxima Medical Center  
Deedee Kommers

040 888 93 50

## Eligibility criteria

## Inclusion criteria

- Being admitted to the NICU
- Being routinely monitored with adhesive electrodes
- Having written parental informed consent
- Being of a post-menstrual age (PMA) that is not already fully represented in the study (representative numbers of three cohorts are included, < 28 weeks PMA, between 28-37 weeks PMA, > 37 weeks PMA)

## Exclusion criteria

- Chest skin lesions preventing placement of electrode belt, since the intended use of the belt is for intact skin.
- Congenital anomalies that prevent placement of the belt.
- Effects of surgery preventing or hindering belt placement, such as laparotomy or stoma
- Contraindications of the Bambi Belt, i.e. use during MRI and electrosurgery

## Study design

### Design

Study type:	Observational non invasive
Intervention model:	Other
Allocation:	Non controlled trial
Masking:	Open (masking not used)
Control:	N/A , unknown

### Recruitment

NL	
Recruitment status:	Pending
Start date (anticipated):	16-06-2021
Enrollment:	15
Type:	Anticipated

### IPD sharing statement

**Plan to share IPD:** Undecided

## Ethics review

Not applicable

Application type:

Not applicable

## Study registrations

### Followed up by the following (possibly more current) registration

No registrations found.

### Other (possibly less up-to-date) registrations in this register

No registrations found.

### In other registers

Register	ID
NTR-new	NL9478
Other	METC MMC : W21.043

## Study results