

# Power Move: a randomized waitlist-controlled study on a computerized motor intervention program to improve motor function in very preterm children at five years of age'

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Motor training with Timocco Training Program significantly improves motor function assessed by the M-ABC.

|                             |                       |
|-----------------------------|-----------------------|
| <b>Ethische beoordeling</b> | Positief advies       |
| <b>Status</b>               | Werving gestart       |
| <b>Type aandoening</b>      | -                     |
| <b>Onderzoekstype</b>       | Interventie onderzoek |

## Samenvatting

### ID

NL-OMON28071

### Bron

Nationaal Trial Register

### Verkorte titel

POWER MOVE

### Aandoening

motor problems after very preterm birth

## Ondersteuning

**Primaire sponsor:** Rotary Gooi en Vechtstreken

**Overige ondersteuning:** Rotary Gooi en Vechtstreken

## Onderzoeksproduct en/of interventie

## Uitkomstmaten

### Primaire uitkomstmaten

Total score on the M-ABC-II-NL

## Toelichting onderzoek

### Achtergrond van het onderzoek

**Rationale:** At early school age, motor problems occur frequently in children born very preterm. Existing effective interventions, such as physical therapy, yield short term benefits only and require parents and child to visit health care institutions. Home-based, child-friendly computer training to remediate motor problems in this population may be at least as effective.

**Objective:** To investigate whether a computerized, motor intervention program, titled 'Timocco' yields significant and clinically reliable improvements in motor function in very preterm children at five years corrected age (CA).

**Study design:** randomized waitlist-controlled intervention study.

**Study population:** Children <320wk and/or <15000 grams, at 5 years CA with a standard score <8 (i.e. <1.0 SD) on the total scale or one of the subscales of the Movement Assessment Battery for Children-II-NL (MABC-II-NL).

**Participating Centers:** Academic Medical Centre Amsterdam, The Netherlands; VU University Medical Centre Amsterdam and University Medical Center Groningen

**Intervention (if applicable):** Timocco® home-based computerized motor training program.

**Main study parameters/endpoints:** Total score on the M-ABC-II-NL.

**Nature and extent of the burden and risks associated with participation, benefit and group relatedness:** Children whose parents provided informed consent will be assessed three times: at follow-up (FU) at the outpatient clinic for follow-up assessment at five years CA, at home before start of the first training session (T1) and within one week after the last training session (T2). Both assessments include administration of tests for motor function, visual-motor function, attentional functioning, and behavior. For the latter, parents and teachers will be asked to complete a questionnaire. The Timocco home-based motor training program will entail a 12 week period with three training sessions ( $\pm 30$  minutes each) per week. During a session, children have to move a colorful gaming ball in order to successfully accomplish game levels of various attractive games that are displayed on a computer screen. As a parent is required to support the child during the playful training session, this program is family-integrated.

The study examines an intervention that we hope yields positive effects for children and parents. There is no risk related to participation and all study and Timocco related activities are non-invasive. The risk of participation is negligible.

### Doel van het onderzoek

Motor training with Timocco Training Program significantly improves motor function assessed by the M-ABC.

### **Onderzoeksopzet**

T0, T1

### **Onderzoeksproduct en/of interventie**

Timocco® home-based computerized motor training program.

## **Contactpersonen**

### **Publiek**

Amsterdam University Medical Centre  
Cornelieke Aarnoudse-Moens

0031205661088

### **Wetenschappelijk**

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## **Deelname eisen**

### **Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)**

- a standard score of  $<8$  (i.e.,  $<1.0$  SD) on the total scale or one of the subscales of the M-ABC-II-NL (a standard score of  $<8$  on the M-ABC-II-NL indicates difficulties with handwriting, aiming and catching, and poor balance skills. Children with severe motor impairments such as CP are not assessed with the M-ABC-II).

### **Belangrijkste redenen om niet deel te kunnen nemen**

## (Exclusiecriteria)

- severe vision problems
- diagnosis cerebral palsy, GMFCS II or higher
- IQ-score <70

## Onderzoeksopzet

### Opzet

|                  |                         |
|------------------|-------------------------|
| Type:            | Interventie onderzoek   |
| Onderzoeksmodel: | Anders                  |
| Toewijzing:      | Gerandomiseerd          |
| Blinding:        | Open / niet geblindeerd |
| Controle:        | N.v.t. / onbekend       |

### Deelname

|                         |                      |
|-------------------------|----------------------|
| Nederland               |                      |
| Status:                 | Werving gestart      |
| (Verwachte) startdatum: | 01-01-2017           |
| Aantal proefpersonen:   | 84                   |
| Type:                   | Verwachte startdatum |

## Voornemen beschikbaar stellen Individuele Patiënten Data (IPD)

**Wordt de data na het onderzoek gedeeld:** Nee

## Ethische beoordeling

|                 |                  |
|-----------------|------------------|
| Positief advies |                  |
| Datum:          | 07-03-2019       |
| Soort:          | Eerste indiening |

## Registraties

## Opgevolgd door onderstaande (mogelijk meer actuele) registratie

Geen registraties gevonden.

## Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

## In overige registers

| Register       | ID                                                                                        |
|----------------|-------------------------------------------------------------------------------------------|
| NTR-new        | NL7568                                                                                    |
| Ander register | TIMOCCO Tel: 1-330-968-2879 526 South Main St. Suite 709A Akron, OH 44311 : METC 2016_259 |

## Resultaten

### Samenvatting resultaten

none yet