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Further to your review and agreement to the Statistical Analysis Plan version indicated above, please sign to indicate approval for your area of responsibility:


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## LIST OF ABBREVIATIONS AND DEFINITION OF TERMS

| ABBREVIATION | Wording Definition |
| :--- | :--- |
| AE | Adverse Event |
| AESI | Adverse Event of Special Interest |
| CCI | Alkaline Phosphatase |
| ALP | Analysis of Covariance |
| ANCOVA | Analysis of Variance |
| ANOVA | Anatomic Therapeutic Chemical |
| ATC | Blind Data Review Meeting |
| BDRM | Body Mass Index |
| BMI | Blood Pressure |
| BP | Beats per minute |
| bpm | Botulinum Toxin |
| BTX | Botulinum Toxin Type A |
| BTX-A | Botulinum Toxin Type A Antibodies |
| BTX-A-Abs | Committee for Medicinal Products for Human Use |
| CHMP | Confidence Interval |
| CI | Cerebral Palsy |
| CP | Electrocardiogram |
| ECG | Electronic Case Report Form |
| eCRF | End of Study |
| EOS | Early Withdrawal |
| EW | Food and Drug Administration |
| FDA | Modified Ashworth Score |
| CCI | International Council for Harmonization |
| GAS | Goal Attainment Scale |
| GMFCS | Gross Motor Function Classification System |
| HR | Heart Rate |
| ICH | Manual Ability Classification System |
| ID | LLT |

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| ABBREVIATION | Wording Definition |
| :--- | :--- |
| MedDRA | Medical Dictionary for Regulatory Authorities |
| mITT | Modified Intent to Treat |
| PDD | Protocol Deviations Document |
| PedsQL | Paediatric Quality of Life |
| PGA | Physician's Global Assessment Scale of Treatment |
| Pesponse |  |
| POM | Proportional Odds Model |
| PP | Per protocol |
| CCI | Preferred Term |
| PT | Primary Targeted Muscle Group |
| PTMG | Quality Control |
| QC | Quality of Life |
| QoL | Serious Adverse Event |
| SAE | Statistical Analysis Plan |
| SAP | Standardised MedDRA Query |
| SMQ | System Organ Class (in MedDRA) |
| SOC | Standard Operating Procedure |
| SOP | Treatment-Emergent Adverse Event |
| TEAE | Treatment-Emergent Adverse Event Leading to |
| TEAEWD | Withdrawal |
| TLF | Table, Listing, and Figure |
| CC | Units States of America |
| U | World Health Organization Drug Dictionary |
| US | Work Instruction |
| WHO-DD |  |
| WI | Units |

## 1 INFORMATION TAKEN FROM THE PROTOCOL

## $1.1 \quad$ Study Objectives

### 1.1.1 Primary Objective

The primary study objective is to assess the efficacy of two doses of Dysport (8 Units/Kilogram ( $\mathrm{U} / \mathrm{kg}$ ) and $16 \mathrm{U} / \mathrm{kg}$ ) compared to Dysport $2 \mathrm{U} / \mathrm{kg}$ used in the treatment of upper limb spasticity in children with cerebral palsy (CP) following a single treatment.

### 1.1.2 Secondary Objectives

The secondary study objective is to assess the long term safety of multiple treatments of Dysport used in this study population.

### 1.1.3 Tertiary Objectives

The tertiary study objectives $\qquad$
$\square$

### 1.2 Study Design

This is a phase III, multicentre, double blind, prospective, randomised, controlled multiple treatment study. Subjects will receive a maximum of four treatments over the course of a minimum of one year's study participation.
At study entry, subjects will be randomised into one of the following three treatment groups for Treatment Cycle 1:

- Group A: Dysport $16 \mathrm{U} / \mathrm{kg}$ in one upper extremity (the study limb).
- Group B: Dysport $8 \mathrm{U} / \mathrm{kg}$ in the study limb.
- Group C: Dysport $2 \mathrm{U} / \mathrm{kg}$ in the study limb.

Randomisation will be in a 1:1:1 ratio. Stratification will be performed according to age range ( 2 to 9 years and 10 to 17 years) and BTX (Botulinum Toxin) naïve or non-naïve status assessed at baseline.
For Treatment Cycles 2, 3 and 4, subjects are planned to receive Dysport $8 \mathrm{U} / \mathrm{kg}$ or $16 \mathrm{U} / \mathrm{kg}$ according to the treatment allocation by the IRS and will remain double blind throughout the study. However, it is possible that subjects will not receive the planned treatment as dose adaptations (reduction or increase) will be possible based upon the Investigator's judgements regarding safety and efficacy. The total dose for the study limb must not exceed 320 U in the $8 \mathrm{U} / \mathrm{kg}$ group and 640 U in the $16 \mathrm{U} / \mathrm{kg}$ group.
The planned retreatment interval is 16 weeks and a maximum of four treatments will be administered.
At study entry, a primary targeted muscle group (PTMG), either the elbow flexors or wrist flexors, will be nominated by the Investigator. The PTMG can be changed for subsequent treatments, from elbow to wrist flexors or wrist to elbow flexors, provided that the following criteria are fulfilled:

- The Modified Ashworth Scale (MAS) score of the other muscle group not selected for the last treatment (new PTMG) must be higher than the last treatment PTMG, and
- The new PTMG must have a modified MAS score of greater or equal to $1+$.

For Treatment Cycles 2, 3 and 4, injection into the lower extremity/extremities and the nonstudy upper limb will be allowed at the same time as the study limb is injected.
The stages of the study and the planned doses for the study are provided in Figure 1.
Figure 1 Planned Study Structure and Dose Modifications Available During the Study

## Injection

All treatments

After each treatment administration, the follow up visit schedule is as follows:

- Week 2 (telephone call, safety follow up).
- Week 4 (telephone call, safety follow up).
- Week 6.
- Week 12 (telephone call, safety follow up).
- Week 16.

At Week 16, subjects will be assessed for their eligibility to receive the next treatment. Subjects who are eligible for retreatment will be given the next treatment. Any subjects not eligible for retreatment will be evaluated every 6 weeks $\pm 2$ weeks in additional visits until they are eligible for retreatment.
Each subject will participate in the study for approximately 1 year to 1 year and 9 months depending on the number of treatments administered and the treatment intervals. The duration of the follow up period will be dependent upon the treatment interval as follows:

- All subjects whose first three treatment intervals fall between $\geq 16$ and $\leq 22$ weeks will receive four treatments and will exit the study as soon as a new
injection is required and no later than 22 weeks after last injection (up to a maximum of 1 year and 9 months' study duration).
- All other subjects will not be given any further study treatment after Week 52 and will exit the study after 16 weeks of follow up of the last treatment.


### 1.2.1 Study Treatment

Subjects will receive a fixed dose of Dysport $2 \mathrm{U} / \mathrm{kg}, 8 \mathrm{U} / \mathrm{kg}$ or $16 \mathrm{U} / \mathrm{kg}$ in the study upper limb in Treatment Cycle 1 and are planned to receive Dysport $8 \mathrm{U} / \mathrm{kg}$ or $16 \mathrm{U} / \mathrm{kg}$ in subsequent treatments according to the treatment allocation by the IRS, illustrated below, and both Investigators and subjects will remain blinded throughout the study. The allocated dose will be reconstituted to a fixed volume of 1.6 mL for injection.

Table 1 Planned Dysport Dose per Group and Treatment Cycle

| Group | Number of <br> Subjects | Treatment <br> Cycle 1 $^{(\mathbf{a})}$ | Treatment Cycles <br> $\mathbf{2 , 3}$ and 4 |
| :--- | :---: | :---: | :---: |
| (a) |  |  |  |

${ }^{(a)}$ The total dose for the study limb must not exceed 320 U in the $8 \mathrm{U} / \mathrm{kg}$ group and 640 U in the $16 \mathrm{U} / \mathrm{kg}$ group.
${ }^{(b)}$ In this group, dynamic dose dispensing will be done by IRS at Treatment Cycle 2 to maintain a balance between subjects receiving $8 \mathrm{U} / \mathrm{kg}$ and $16 \mathrm{U} / \mathrm{kg}$.
For Treatment Cycles 2, 3 and 4, and according to subject response, if any given total dose is not tolerated, the Investigator will request a dose reduction of $50 \%$ in the IRS.


For Treatment Cycles 3 and 4, if any given total dose is not adequate for the treatment of the subject's upper limb spasticity, the Investigator can request a dose increase in the IRS.
dose increase is possible for those subjects who were given Dysport $16 \mathrm{U} / \mathrm{kg}$ as the subject was already given the highest dose allowed in the study. $\qquad$


## CCl

If there is no need to inject the lower limbs, and only the non-study upper limb is to be injected (on top of the study upper limb), the dose in the non-study upper limb should not exceed the dose detailed in Table 3.

Table 3 Dysport Dose in the Non-Study Upper Limb at Treatment Cycles 2, 3, and 4

| Body Weight (kg) | Maximum Dose |
| :--- | :---: |
| 10 to 40 | $5 \mathrm{U} / \mathrm{kg}$, calculated up to 40 kg |
| 40 and over | 200 U |

If there is no need to inject the non-study upper limb and only one or two lower $\operatorname{limb}(\mathrm{s})$ are to be injected (on top of the study upper limb), the dose in the lower limb(s) should not exceed the dose detailed in Table 4.

Table 4 Dysport Dose in the Lower Limb(s) at Treatment Cycles 2, 3, and 4

| Body Weight (kg) | Maximum Dose |
| :--- | :---: |
| 10 to 36 | $10 \mathrm{U} / \mathrm{kg}$, calculated up to 36 kg |
| 36 and over | 360 U |



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### 1.2.2 Study Population

Approximately 210 male and female subjects will be randomised into the study. Subjects will be between 2 and 17 years of age, with a body weight of $\geq 10 \mathrm{~kg}$, with a diagnosis of CP and who have increased muscle tone/spasticity in at least one upper limb. Additionally, subjects must have a MAS score $\geq 2$ in the upper limb PTMG of the study limb (the limb to be injected at Treatment Cycle 1) at the baseline visit and be classified as Gross Motor Function Classification System (GMFCS) Level 1 to 4.


### 1.2.3 Study Exposure

The overall duration of the study is anticipated to be approximately 4 years and 9 months. Individual subject participation will be approximately 1 year to 1 year and 9 months, depending on the number of treatments administered and the treatment intervals. The 1 year and 9 month follow up period will enable subjects whose first three treatment intervals fall between $>16$ and $\leq 22$ weeks to receive four treatments, therefore providing efficacy data for a minimum of 1 year.

### 1.3 Methods and Procedures

### 1.3.1 Subject Identification and Allocation to Study Treatment

All subjects enrolled must be identifiable throughout the study. The Investigator will maintain a list of subject numbers and names to enable records to be found at a later date if required.
At screening, potential subjects will be allocated a subject number. Following confirmation of eligibility for the study, subjects will be given a randomisation number and allocated to one of the treatment groups specified in Section 1.2.

### 1.3.2 Subject Assessments

### 1.3.2.1 Efficacy Assessments

- MAS: A six-point scale which measures the amount of muscle tone by measuring the resistance of the muscle to passive lengthening or stretching [4]. The Investigator will grade muscle tone in the PTMG (elbow flexors or wrist flexors) from 0 (no increase in tone) to 4 (affected part(s) rigid in flexion or extension). The MAS will also be used to assess muscle tone in the injected muscles (elbow, wrist and finger flexors) in the study limb other than the ones of the PTMG, as well as to assess muscle tone in the injected muscles of the nonstudy upper limb.
The MAS will be obtained at baseline, at Week 6 and Week 16 of each Treatment Cycle, and also at the end of study (EOS) visit or early withdrawal (EW).
Also quantitative analyses on the MAS score will be performed, the original score ' $1+$ ' will be considered as the derived numeric score ' 2 ' and the higher original numeric scores will be incremented by one as summarized in Section 3.2.13.19.
- Physician's Global Assessment Scale of Treatment Response (PGA): The PGA of treatment response will be assessed by asking the Investigator the following question: 'how would you rate the response to treatment in the subject's upper limb since the start of the study?' Answers will be made on a nine-point rating scale (-4: markedly worse, -3: much worse, -2: worse, -1 : slightly worse, 0 : no change, +1 : slightly improved, +2 : improved, +3 : much improved, and +4 : markedly improved).
The PGA of treatment response will be obtained at baseline, at Week 6 and Week 16 of each Treatment Cycle, and also at the EOS/EW.
- Goal Attainment Scale (GAS): A functional scale used to measure progress towards individual therapy goals. At baseline of each Treatment Cycle one to three individual goals will be defined for each subject by the Investigator and the child's parents/guardians/caregivers prior to treatment. The importance and difficulty of each selected goal will be rated on a scale from 0 (Not at all important/difficult) to 3 (very important/difficult). Exactly one goal (the primary goal) must be rated as very important. Post-baseline the outcome to reach each goal will be rated on a 5 -point scale ( -2 : Much less than expected outcome, -1 : somewhat less than expected outcome, 0 : expected outcome, 1 : somewhat more than expected outcome, 2: Much more than expected outcome) has to be determined.

The GAS for each goal will be evaluated post-baseline at Week 6 and Week 16 of each Treatment Cycle, and also at the EOS/EW, and the total GAS score will be calculated using the formula in Section 3.2.13.20. A total GAS score of 50 means all individual goals have been achieved as expected.


- Paediatric Quality of Life (PEDsQL) Inventory: Parents/guardians will be asked to complete questionnaires on their child's QoL [15] at each post-treatment visit to the study centre except Week 6. The PedsQL parent inventory measures healthcare concepts for children/adolescents of ages 2 to 18 years of age [16]. The Generic Core Scales cover four multidimensional scales including physical, emotional, social and school aspects with three
summary scales of total scale score, physical health summary score and psychosocial health summary score.
Parents/guardians will also complete the Condition-specific Module in CP (in countries where translation is available) [16], which is a complement to the Generic Core Scale of the PedsQL. It is designed to provide greater measurement sensitivity for circumscribed populations. The answers to the questionnaire will be obtained at baseline, at Week 16 of Treatment Cycle 1, and at the EOS/EW.
- For each defined scale a score is calculated using the transformations in Section 3.2.13.21.


### 1.3.2.2 Safety Assessments

- Adverse Events (AEs): Collected from the signing of informed consent up until the EOS.
- Physical examination: A physical examination will be carried out by a physician or by another qualified staff member designated by the Investigator at the screening visit and at the EOS/EW. If in the opinion of the Investigator there are any clinically significant changes in the physical examination findings (abnormalities) they will be recorded as AEs.
- Vital signs: Systolic and diastolic blood pressure (BP), and heart rate (HR) will be measured at each visit to the study centre. Blood pressure will be measured with the subject in a sitting position.
- Electrocardiogram (ECG): Subjects will have a set of three 12-lead ECG recordings taken at the screening visit (considered as baseline assessment), then subsequently one 12-lead ECG at Treatment Cycle 1, Week 6 and at the EOS/EW. The 12-lead ECG recordings will be performed at a paper speed of $25 \mathrm{~mm} / \mathrm{sec}$, recorded with the subject supine. Analysis of the ECG results will be performed in a central laboratory.
Analysis of the duration of the QT/QTc interval (for both Fridericia's and Bazett's methods), the HR and the presence of any of the following ECG abnormalities: new morphologies, arrhythmias, second degree AV block, third degree AV block, ST segment abnormalities, T-wave abnormalities, Uwave abnormalities, myocardial infarction, right bundle branch block, left bundle branch block will be performed. These and any other clinically relevant abnormality will also be reported by the central provider to the Investigator and recorded as an AE.
- Clinical laboratory parameters:

Clinical chemistry (including serum Alkaline Phosphatase (ALP) - total and bone isoenzyme, and HbA1c): Blood sample will be collected at Treatment Cycle 1, Day 1 (baseline) and EOS/EW. In addition, a blood sample for serum ALP - total and bone isoenzyme, and HbA 1 c only will be collected at Treatment Cycle 1, Week 16.
Pregnancy test: At Day 1 of each treatment for all female subjects of childbearing potential and for those subjects reaching Tanner Stage II or more breast development, a urine sample will be collected for a pregnancy test. If
the urine pregnancy test is found to be positive, it will be followed up with a serum pregnancy test ( 1 mL blood) conducted at the central laboratory.

- Presence of antibodies against BTX-A (BTX-A-Abs): Tests for the presence of BTX-A-Abs will be done prior to study treatment administration at baseline and at the EOS/EW.


### 1.3.2.3 Other Assessments

Other assessments collected include the following, recorded at screening only unless otherwise specified:

- Demographics (date of birth/age, sex, ethnicity and race)
- Medical and surgical history (including ongoing medical history)
- Cerebral Palsy history and status
- Botulinum toxin treatment history
- Gross motor function classification system level
- Neurological examination
- Body weight and height (recorded at baseline, Week 16, and at the EOS/EW)
- Tanner grading scale for breast development (all female subjects)
- Hypertonia assessment tool
- Manual Ability Classification System (MACS) for subjects older than 4 years of age ( 4 years included) and mini-MACS for subjects between 2 and 4 years of age (4 years excluded) (baseline only)
- Prior and concomitant medications and non drug therapies (including physiotherapy, and occupational therapy) and concomitant surgical procedures throughout the study
- Home exercises and use of splints and/or orthoses throughout the study.


### 1.3.2.4 Withdrawal/Discontinuation

Under no circumstances will subjects be randomised into this study more than once. If one or more of the following occurs, the subject will be withdrawn from the study:

- Withdrawal of informed consent
- Requirement for administration of concomitant medications and/or treatments that are not allowed under the study protocol
- Occurrence of an AE or other nonmedical event, that in the opinion of the Investigator, would not be in the subject's best interest were they to continue in the study
- Pregnancy
- Investigator's and/or Sponsor's decision to withdraw the subject if it is considered to be in the subject's best interest
- Continuous failure to comply with the provisions of the study protocol which is likely to have an adverse impact on the safety or wellbeing of the subject or subjects, or to jeopardise the scientific value of the study

- Requirement during the study of an injection in the nonstudy upper limb or lower limb(s) without an injection in the study limb.
The exact reason(s) for withdrawal must be recorded, if available. If possible, a complete final examination should be performed for all subjects who withdraw. In case of withdrawal due to an AE , the subject should be followed up by the Investigator outside the study framework.


### 1.3.4 Planned Sample Size

The sample size required for this study has been determined on the basis of the sample size estimate for each of the three criteria to be considered (superiority of any of the two tested Dysport doses to Dysport $2 \mathrm{U} / \mathrm{kg}$ on the primary efficacy endpoint, superiority of any of the two tested Dysport doses to Dysport $2 \mathrm{U} / \mathrm{kg}$ on the first secondary efficacy endpoint, and proper assessment of the long term safety of the two tested Dysport doses); the largest of these three estimates is used as the sample size of the study.



## Sample Size of the Study

Given the above sample size estimates, a targeted study sample size of 210 randomised subjects (i.e. 70 randomised subjects per treatment group) is considered sufficient to meet both the primary efficacy objective and the long term safety objectives.
Using a sample size of 210 as the largest of the three required figures means the actual power for the testing on the primary efficacy endpoint and the testing on the first secondary efficacy endpoint rises to $99 \%$ and $99 \%$, respectively. As a result, the actual power of the study to detect a significant effect of any tested Dysport dose for both efficacy endpoints (US-targeted methodology) is $98 \%$ (= 99\% x 99\%).
2 SUBJECT POPULATIONS (ANALYSIS SETS)

### 2.1 Efficacy

### 2.1.1 Modified Intent-to-treat Population

The modified Intent-to-treat (mITT) population will consist of all randomised subjects who received at least one injection of the study treatment and had a MAS score in the PTMG assessed both at baseline and at Treatment Cycle 1, Week 6.
The mITT population will be analysed using the dose group as randomised, regardless of treatment actually received.

### 2.1.2 Per Protocol Population

The Per Protocol (PP) population will consist of all subjects from the mITT population who are not major protocol violators between baseline and the Treatment Cycle 1, Week 6 visit (inclusive).
The allocation of subjects to the PP population will be finalized and documented prior to unblinding.
The PP population will be analysed using the dose group as randomised, regardless of treatment actually received.

### 2.2 Safety Population

The safety population will consist of all randomised subjects who received at least one injection of study treatment, analysed using dose actually received.
In case a subject has not received the planned dose of 1.6 ml in the study limb the actual study limb dose will be calculated based on the actual volume received.

### 2.3 Screened Population

The screened population will consist of all subjects enrolled.

### 2.4 Randomised Population

The Randomised population will consist of all subjects randomised i.e. all subjects allocated to a treatment group at random.

### 2.5 Pharmacokinetics

Not applicable.

### 2.6 Populations of Primary Interest

For the fixed dose Treatment Cycle 1, the primary population for the efficacy analyses will be the mITT population.
Secondary populations of interest for the efficacy analyses will be the PP population and the Randomised Population.
For the evaluation of efficacy over repeated treatments, analyses per Treatment Cycle will be performed using the available data from all subjects of the mITT population in the specified treatment cycle according to the planned dose for the specified treatment cycle.
The safety analyses of the fixed dose Treatment Cycle 1 will be performed on the safety population.
For the evaluation of safety over repeated treatments, analyses per Treatment Cycle will be performed using the available data from all subjects of the safety population in the specified treatment cycle according to the actual dose received in the specified Treatment Cycle.

### 2.7 Reasons for Exclusion from the Populations

Any major protocol deviation will be described in the Protocol Deviations Document (PDD) and its impact on the membership to each analysis population (i.e. mITT, PP and safety populations) for any subject having experienced it will be specified.
The list of major protocol deviations impacting the PP population membership in the latest version of the PDD will be reviewed during the blind data review meeting (BDRM) held prior to database lock, before any unblinding of treatment groups. If necessary, that list will be updated to include any additional major protocol deviation impacting the PP population membership. PP population will be defined for the fixed dose Treatment Cycle 1 only.

## 3 STATISTICAL METHODS

### 3.1 Statistical Analysis Strategy

The statistical analyses will be performed in accordance with ICH E9 guideline [1] and will be based on the pooled data from the individual study sites, unless otherwise stated.
Statistical analyses will be performed by a Contract Research Organisation CCl , under the supervision of the Sponsor's statisticians.
Overall, the analysis strategy is to evaluate efficacy and safety data from the initial fixed dose Treatment Cycle 1, where only the study limb could be treated. In addition efficacy and safety over repeated treatments will be evaluated, using analyses by Treatment Cycle, as described below.
Baseline for all analyses, including by Treatment Cycle, is defined as the last value prior to the initial Study Treatment 1 on Day 1.

## Fixed dose Treatment Cycle 1

For assessment of efficacy and safety of Dysport 8 or $16 \mathrm{U} / \mathrm{kg}$ for the treatment of upper limb spasticity, relative to the minimal dose of $2 \mathrm{U} / \mathrm{kg}$, Treatment Cycle 1 will be evaluated in which a fixed dose was administered to the designated study limb.
Data will be analysed according to the randomised dose (efficacy) or actual dose received (safety) for the study limb in Treatment Cycle 1.

## Repeat Treatment

For the assessment of efficacy and safety over repeated Dysport treatments, the focus will be on those subjects who received 8 or $16 \mathrm{U} / \mathrm{kg}$ in the study limb. Data will be presented by Treatment Cycle and analysed according to the planned dose (efficacy) or actual dose received (safety) in the study limb in the stipulated Treatment Cycle.
As subjects can receive Dysport in the lower limb(s) and non-study upper limb from Study Treatment 2 onwards, safety over repeated Treatment Cycles will also be evaluated using the total body dose of Dysport received in the specified Treatment Cycle.

### 3.1.1 Primary Efficacy Endpoint

The primary efficacy endpoint is the mean change from Baseline to Treatment Cycle 1, Week 6 in MAS score in the Treatment 1 Cycle PTMG (elbow flexors or wrist flexors).

### 3.1.2 Secondary Efficacy Endpoints

The secondary efficacy endpoints are:

- Mean PGA score at Treatment Cycle 1, Week 6.
- Mean GAS score at Treatment Cycle 1, Week 6.


### 3.1.3 Tertiary Efficacy Endpoints

In the following list, the term 'all post-treatment visits' refers to data from each visit at each treatment cycle (Treatment Cycles 1, 2, 3, and 4), unless it is specifically stated that it relates only to visits from the fixed dose Treatment Cycle 1.
Where the term 'except Week 6' is utilised for analyses of Treatment Cycle 1, it only means that this is already a specified primary or secondary endpoint, not that it will not be analysed.

- Mean change from Baseline to all post-treatment visits of Treatment Cycle 1 (except Week 6) in MAS score in the Treatment Cycle 1 PTMG.
- Mean change from Baseline to all post-treatment visits in MAS score in each injected muscle group (elbow, wrist and finger flexors) of the study limb.

- Mean PGA score at all post-treatment visits (except Treatment Cycle 1, Week $6)$.

- Mean GAS score at all post-treatment visits (except Treatment Cycle 1, Week $6)$.

- Mean change from Baseline to both post-treatment PedsQL scores.


### 3.1.4 Safety Endpoints

The safety endpoints are:

- Treatment emergent adverse events (TEAEs) .
- Vital signs (systolic and diastolic BP and HR): absolute values and change from Baseline at each visit to the study centre.
- Body weight and height: absolute values and change from baseline at Week 16 of each treatment and at the EOS/EW.
- Clinical chemistry (including serum ALP - total and bone isoenzyme, and HbA1c): absolute values and change from Baseline at Treatment Cycle 1, Week 16 (serum ALP - total and bone isoenzyme, and HbA1c only) and at the EOS/EW.
- Presence of antibodies against Botulinum Toxin Type A (BTX-A-Abs) at baseline and at the EOS/EW.
- A 12-lead ECG: absolute values and change from Baseline in ECG parameters and morphology at Treatment Cycle 1, Week 6 and at the EOS/EW.


### 3.1.5 Multiplicity






### 3.1.6 Significance Testing and Estimation

Fixed Dose Treatment Cycle 1
Apart from tests described in section 3.1.5, all statistical tests performed on the fixed dose Treatment Cycle 1 efficacy endpoints will be conducted, unless otherwise specified, at a two-tailed $\alpha$ level of 0.05 and each tested Dysport dose group ( $8 \mathrm{U} / \mathrm{kg}$ and $16 \mathrm{U} / \mathrm{kg}$ ) will be compared to Dysport $2 \mathrm{U} / \mathrm{kg}$ separately. Statistical tests will be performed on the efficacy endpoints for Treatment Cycle 1, up to Week 16 (inclusive), no statistical tests will be performed for any additional visits of Treatment Cycle 1 (any visits after Week 16).

## Repeat Treatment

For the analyses by Treatment Cycle no statistical testing will be performed.

### 3.2 Analysis Methods

Unless otherwise specified, all summary tables will be presented by treatment groups defined in the following sections. For data listings, all data will be listed by subject, Treatment Cycle and visit (or assessment date), if applicable.

### 3.2.1 Treatment Groups

### 3.2.1.1 Efficacy Treatment Groups

Fixed Dose Treatment Cycle 1
For Treatment Cycle 1 data will be summarized by the randomised Dysport Dose in the study limb. Data will be tabulated by randomised study limb treatment group, as labelled and ordered below:

- Dysport $2 \mathrm{U} / \mathrm{kg}$
- Dysport $8 \mathrm{U} / \mathrm{kg}$
- Dysport $16 \mathrm{U} / \mathrm{kg}$
- Dysport Combined 8 and $16 \mathrm{U} / \mathrm{kg}$.


## Repeat Treatment

For the evaluation of repeated Dysport treatment by Treatment Cycle (Treatment Cycles 2, 3, and 4) data will be tabulated by the planned dose to be administered to study limb in the designated Treatment Cycle. Data will be tabulated by study limb treatment group, as labelled and ordered below:

- Dysport $4 \mathrm{U} / \mathrm{kg}$
- Dysport $8 \mathrm{U} / \mathrm{kg}$
- Dysport $16 \mathrm{U} / \mathrm{kg}$
- Dysport Combined 8 and $16 \mathrm{U} / \mathrm{kg}$.

The $4 \mathrm{U} / \mathrm{kg}$ group will include all subjects who received $4 \mathrm{U} / \mathrm{kg}$ or less.

### 3.2.1.2 Safety Treatment Groups

## Fixed Dose Treatment Cycle 1

Safety data for Treatment Cycle 1 will be summarized by the actual Dysport dose received in the study limb, as labelled and ordered below:

- Dysport $2 \mathrm{U} / \mathrm{kg}$
- Dysport $8 \mathrm{U} / \mathrm{kg}$
- Dysport $16 \mathrm{U} / \mathrm{kg}$
- Dysport Combined 8 and $16 \mathrm{U} / \mathrm{kg}$
- Total Dysport.

Subjects who received an actual dose $\leq 6 \mathrm{U} / \mathrm{kg}$ at Treatment Cycle 1 will be assigned to treatment group 'Dysport $2 \mathrm{U} / \mathrm{kg}$ ', subjects who received an actual dose from $>6 \mathrm{U} / \mathrm{kg}$ to $\leq 12 \mathrm{U} / \mathrm{kg}$ will be assigned to treatment group 'Dysport $8 \mathrm{U} / \mathrm{kg}$ ', and subjects with an actual dose $>12 \mathrm{U} / \mathrm{kg}$ will be assigned to 'Dysport $16 \mathrm{U} / \mathrm{kg}$ '.
In addition, selected safety tables will be repeated for those subjects who have received an actual Dysport dose in the study limb of exactly 2, 8, or $16 \mathrm{U} / \mathrm{kg}$, i.e. excluding those who did not receive precisely the dose stated and were allocated to the nearest dose group, as described above).

## Repeat Treatment

For the evaluation of repeated Dysport treatment data will be tabulated by the actual dose received in the study limb in the designated Treatment Cycle.
Data will be tabulated by study limb treatment group, as labelled and ordered below:

- Dysport $2 / 4 \mathrm{U} / \mathrm{kg}$
- Dysport $8 \mathrm{U} / \mathrm{kg}$
- Dysport $16 \mathrm{U} / \mathrm{kg}$
- Dysport Combined 8 and $16 \mathrm{U} / \mathrm{kg}$
- Total Dysport.

Subjects who received an actual dose $\leq 6 \mathrm{U} / \mathrm{kg}$ at Treatment Cycle 1 will be assigned to treatment group 'Dysport $2 / 4 \mathrm{U} / \mathrm{kg}$ ', subjects who received an actual dose from $>6 \mathrm{U} / \mathrm{kg}$ to $\leq 12 \mathrm{U} / \mathrm{kg}$ will be assigned to treatment group 'Dysport $8 \mathrm{U} / \mathrm{kg}$ ', and subjects with an actual dose $>12 \mathrm{U} / \mathrm{kg}$ will be assigned to 'Dysport $16 \mathrm{U} / \mathrm{kg}$ '.

In addition, selected tables will be analysed by the actual total body dose received in the designated Treatment Cycle (in U/kg). The total body dose will be assigned based on the sum of the dose administered into each limb injected.
For the total body dose treatment groups will be labelled and ordered as follows:

- Dysport $\leq 5 \mathrm{U} / \mathrm{kg}$
- Dysport $10 \mathrm{U} / \mathrm{kg}$
- Dysport 20 U/kg
- Dysport $30 \mathrm{U} / \mathrm{kg}$
- Total Dysport.

Subjects who received an actual dose from $>5 \mathrm{U} / \mathrm{kg}$ to $\leq 15 \mathrm{U} / \mathrm{kg}$ will be assigned to treatment group 'Dysport $10 \mathrm{U} / \mathrm{kg}$ ', subjects who received an actual dose from $>15 \mathrm{U} / \mathrm{kg}$ to $\leq 25 \mathrm{U} / \mathrm{kg}$ will be assigned to treatment group 'Dysport $20 \mathrm{U} / \mathrm{kg}$ ', and subjects with an actual dose $>25 \mathrm{U} / \mathrm{kg}$ will be assigned to 'Dysport $30 \mathrm{U} / \mathrm{kg}$ '.

### 3.2.2 Efficacy

All efficacy analyses for the fixed dose Treatment Cycle 1 will be performed on the mITT population. Assessment of repeat efficacy by Treatment Cycle will only include subjects who received the treatment in the designated Treatment Cycle. The primary and secondary efficacy analyses (designated efficacy parameters at Week 6 of the fixed dose Treatment Cycle 1) will also be performed on the PP population. Efficacy tables will be presented by treatment group of the Study Limb Dose, see Section 3.2.1.1.
Baseline will be defined as the last measurement collected prior to receiving the initial study treatment in Treatment Cycle 1 on Day 1. MAS score,
may also have been measured in muscle groups other than those injected. Only assessments from subjects who received treatment in the respective muscle group will be included in the analyses.
In addition to the analyses described below, descriptive statistics will be provided for all efficacy endpoints.

### 3.2.2.1 Primary Efficacy Analysis

The primary efficacy endpoint is the mean change from Baseline to Treatment Cycle 1, Week 6 in MAS score in the Treatment Cycle 1 PTMG (elbow flexors or wrist flexors).
The primary efficacy endpoint will be analysed using an Analysis of Covariance (ANCOVA) on the rank of the mean changes. This model will include treatment group, the baseline value, the two stratification factors (age range and BTX treatment naïve status at baseline) and the pooled centre as fixed covariates.
For handling of multiplicity see section 3.1.5.
Adjusted means (LS Means) together with their standard error (SE) and 95\% confidence interval (CI) will be provided for the ranked changes of each treatment group. To help interpret the results the LS mean rank values will be back transformed to the original (derived) scale. The LS means on the original scale will be presented as well as the estimate of the magnitude of the back transformed difference between the treatment groups (for any of the two tested doses of Dysport ( $8 \mathrm{U} / \mathrm{kg}$ and $16 \mathrm{U} / \mathrm{kg}$ ), the LS mean of the back transformed difference Dysport tested dose - Dysport $2 \mathrm{U} / \mathrm{kg}$ ) and the associated p-values. Additionally, for all other effects taken into account in the ANCOVA the respective type III test p-value will be presented.
The following SAS $^{\circledR}$ code will be used to compare the Dysport ( $8 \mathrm{U} / \mathrm{kg}$ and $16 \mathrm{U} / \mathrm{kg}$ ) versus Dysport $2 \mathrm{U} / \mathrm{kg}$.

## ANCOVA model without interaction

proc mixed data $=<\mathrm{xxx}>$;
class Treatment age_range BTX_stratum centre;
model rank_change $=$ Treatment baseline age_range BTX_stratum centre / solution cl;
/* contrast analyses */
estimate 'Dysport $16 \mathrm{U} / \mathrm{kg}$ versus Dysport $2 \mathrm{U} / \mathrm{kg}$ ' Treatment -1 $0 \mathrm{l} / \mathrm{cl}$;
estimate 'Dysport $8 \mathrm{U} / \mathrm{kg}$ versus Dysport $2 \mathrm{U} / \mathrm{kg}^{\prime}$ Treatment -1 $10 / \mathrm{cl}$;
/* Adjusted means and 95\% CI by treatment group */
lsmeans Treatment/ cl ;
ods output SolutionF $=$ SolutionF Tests3 $=$ Tests3
Estimates $=$ Estimates LSMeans $=$ LSMeans;
run;
quit;

### 3.2.2.2 Sensitivity Analyses for the Primary Efficacy Endpoint

## Centre Effect

In order to investigate homogeneity of treatment response across centres a sensitivity analysis will be conducted: The ANCOVA model on the rank will be rerun, adding the treatment by centre interaction term, fitted as a fixed effect. If the pvalue from the interaction term in the model is lower than 0.1 then the treatment by interaction will be deemed statistically significant and it will be concluded that the treatment effect is not constant from centre to centre. If this is the case then the influence of centre on the treatment effect will be further investigated by estimating and plotting the treatment groups differences (for any of the higher doses of Dysport, LS Mean of the rank values together with their SE and $95 \% \mathrm{CI}$ as well as
the LS mean of the back transformed difference ( $8 \mathrm{U} / \mathrm{kg}$ and $16 \mathrm{U} / \mathrm{kg}$ ) Dysport $2 \mathrm{U} / \mathrm{kg}$ ) separately for each centre. This analysis will be performed using postpooling centres. The strategy for pooling centres has been detailed in section 3.2.16.

## ANCOVA model with interaction:

proc mixed data $=<x x x>$;
class Treatment BTX_stratum age_range centre;
model rank_change = Treatment baseline age_range BTX_stratum centre
centre*treatment / solution cl;
/* contrast analyses for centre 1 */
estimate 'Dysport $16 \mathrm{U} / \mathrm{kg}$ versus Dysport $2 \mathrm{U} / \mathrm{kg}$ '
Treatment-1 01 Centre* Treatment -1 $01 / \mathrm{cl}$;
estimate 'Dysport $8 \mathrm{U} / \mathrm{kg}$ versus Dysport $2 \mathrm{U} / \mathrm{kg}^{\prime}$
Treatment -1 10 Centre* Treatment -1 $10 / \mathrm{cl}$;
/* contrast analyses for centre 2 */
estimate 'Dysport $16 \mathrm{U} / \mathrm{kg}$ versus Dysport $2 \mathrm{U} / \mathrm{kg}$ '
Treatment -1 01 Centre* Treatment $000-101 / \mathrm{cl}$;
estimate 'Dysport $8 \mathrm{U} / \mathrm{kg}$ versus Dysport $2 \mathrm{U} / \mathrm{kg}^{\prime}$
Treatment -1 10 Centre* Treatment $000-110 / \mathrm{cl}$;
/* contrast analyses for last centre */
estimate 'Dysport $16 \mathrm{U} / \mathrm{kg}$ versus Dysport $2 \mathrm{U} / \mathrm{kg}$ '
Treatment -101 Centre* Treatment $000 \ldots .101 / \mathrm{cl}$;
estimate 'Dysport $8 \mathrm{U} / \mathrm{kg}$ versus Dysport $2 \mathrm{U} / \mathrm{kg}^{\prime}$
Treatment -1 10 Centre* Treatment $000 \ldots-110 / \mathrm{cl}$;
/* Adjusted means and $95 \%$ CI by treatment group */
lsmeans centre*Treatment/ cl ; ods output SolutionF = SolutionF Tests3 = Tests3
Estimates $=$ Estimates LSMeans $=$ LSMeans;
run;
quit;

## Robustness (Proportional Odds Model)

To check the robustness of the rank ANCOVA analysis, a sensitivity analysis will be performed using the Proportional Odds Model (POM). This analysis will be applied to the ordered changes in MAS and the resulting odds ratio measures the relative probability of a higher improvement in MAS on Dysport ( $8 \mathrm{U} / \mathrm{kg}$ and $16 \mathrm{U} / \mathrm{kg}$ ) as compared to Dysport $2 \mathrm{U} / \mathrm{kg}$. An odds ratio $>1$ for Dysport ( $8 \mathrm{U} / \mathrm{kg}$ and $16 \mathrm{U} / \mathrm{kg}$ ) versus Dysport $2 \mathrm{U} / \mathrm{kg}$ indicates a positive treatment effect in favour of Dysport ( $8 \mathrm{U} / \mathrm{kg}$ and $16 \mathrm{U} / \mathrm{kg}$ ), and an odds ratio $<1$ indicates a treatment effect in favour of Dysport $2 \mathrm{U} / \mathrm{kg}$. This model will include treatment group, the baseline value, the two stratification factors (age range and BTX treatment naive status at baseline) and the pooled centre as fixed covariates. The odds ratios will be presented together with their $95 \% \mathrm{CI}$ and the associated p-value. Additionally, for all other effects taken into account in the POM, the respective type III test $p$-value will be presented.
The following $\mathrm{SAS}^{\circledR}$ code will be used to compare the Dysport ( $8 \mathrm{U} / \mathrm{kg}$ and $16 \mathrm{U} / \mathrm{kg}$ ) versus Dysport $2 \mathrm{U} / \mathrm{kg}$.

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```
proc logistic data = <xxx> order = internal;
    class Treatment (ref 'Dysport 2 U/kg') age_range BTX_stratum centre /
param = ref;
    model change (ascending) = Baseline Treatment age_range BTX_stratum
    centre / clodds = wald;
    oddsratio 'Treatment' Treatment / cl wald;
    /* contrast analyses */
    contrast 'Dysport 16 U/kg versus Dysport 2 U/kg' Treatment 1 0/ e estimate =
    exp;
    contrast 'Dysport 8 U/kg versus Dysport 2 U/kg' Treatment 0 1/ e estimate =
    exp;
    /* p-value and odds ratio by treatment group */
    ods output Nobs = Nobs Oddsratioswald = Oddsratios Contrastestimate =
    Contrasts Type3 = Type3 ConvergenceStatus = convstat
    CumulativeModelTest = Propval;
run;
quit;
```

In addition a summary table will present the number and percent of subjects within each change category at Week 6 by treatment group.

## Missing Values

In order to assess the impact of missing data on the conclusion of the primary analysis sensitivity analysis of the primary efficacy endpoint will be performed on the population of all randomised subjects. Details are provided in section 3.2.4.1.

### 3.2.2.3 Secondary Efficacy Analysis

The first secondary efficacy endpoint is the mean PGA score at Treatment Cycle 1, Week 6.
This endpoint will be analysed using an Analysis of Variance (ANOVA) on the rank. This model will include treatment group, the two stratification factors and the pooled centre as fixed covariates.
For handling of multiplicity see section 3.1.5.
LS Means together with their SE and $95 \%$ CI will be provided for the rank values of each treatment group. The LS means on the original scale will be presented as well as the estimate of the magnitude of the back transformed difference between the treatment groups (for any of the two tested doses of Dysport ( $8 \mathrm{U} / \mathrm{kg}$ and $16 \mathrm{U} / \mathrm{kg}$ ), the LS mean of the back transformed difference Dysport tested dose - Dysport $2 \mathrm{U} / \mathrm{kg}$ ) and the associated p-values. Additionally, for all other effects taken into account in the ANOVA the respective type III test p-value will be presented.
The $\mathrm{SAS} ®$ code for this model is as follows:
proc mixed data $=<x x x>$;
class Treatment age_range BTX_stratum centre;
model rank_score = Treatment age_range BTX_stratum centre / solution cl;
/* contrast analyses */
estimate 'Dysport $16 \mathrm{U} / \mathrm{kg}$ versus Dysport $2 \mathrm{U} / \mathrm{kg}$ ' Treatment -1 0 1/cl;
estimate 'Dysport $8 \mathrm{U} / \mathrm{kg}$ versus Dysport $2 \mathrm{U} / \mathrm{kg}$ ' Treatment -1 $10 / \mathrm{cl}$;
/* Adjusted means and 95\% CI by treatment group */
1smeans Treatment/ cl ;
ods output SolutionF $=$ SolutionF Tests3 $=$ Tests 3
Estimates $=$ Estimates LSMeans $=$ LSMeans;
run;
quit;
The second secondary efficacy endpoint is the mean GAS score at Treatment Cycle 1, Week 6. This endpoint will be analysed using an ANOVA on the GAS score. This model will include treatment group, the two stratification factors and the pooled centre as fixed covariates. Same output will be presented as for mean PGA.

### 3.2.2.4 Sensitivity Analyses for the First Secondary Efficacy Endpoint

## Robustness (Proportional Odds Model)

To check the robustness of the rank ANOVA analysis, a sensitivity analysis will be performed using the POM. This analysis will be applied to the ordered PGA categorical responses and the resulting odds ratio measures the relative probability of a better PGA response on Dysport ( 8 and $16 \mathrm{U} / \mathrm{kg}$ ) as compared to Dysport $2 \mathrm{U} / \mathrm{kg}$. An odds ratio $>1$ for Dysport ( 8 and $16 \mathrm{U} / \mathrm{kg}$ ) versus Dysport $2 \mathrm{U} / \mathrm{kg}$ indicates a positive treatment effect in favour of Dysport (8 and $16 \mathrm{U} / \mathrm{kg}$ ), and an odds ratio $<1$ indicates a treatment effect in favour of Dysport $2 \mathrm{U} / \mathrm{kg}$. This model will include treatment group, the two stratification factors (age range and BTX treatment naive status at baseline) and the pooled centre as fixed covariates. The odds ratios will be presented together with their $95 \% \mathrm{CI}$ and the associated p -value. Additionally, for all other effects taken into account in the POM, the respective type III test p -value will be presented.
The following SAS $^{\circledR}$ code will be used to compare the Dysport ( $8 \mathrm{U} / \mathrm{kg}$ and $16 \mathrm{U} / \mathrm{kg}$ ) versus Dysport $2 \mathrm{U} / \mathrm{kg}$.
proc logistic data $=<\mathrm{xxx}\rangle$ order $=$ internal;
class Treatment (ref 'Dysport $2 \mathrm{U} / \mathrm{kg}$ ') age_range BTX_stratum centre /
param $=$ ref;
model score $($ descending $)=$ Treatment age_range BTX_stratum centre / clodds
$=$ wald;
oddsratio 'Treatment' Treatment / cl wald;
/* contrast analyses */
contrast 'Dysport $16 \mathrm{U} / \mathrm{kg}$ versus Dysport $2 \mathrm{U} / \mathrm{kg}^{\prime}$ Treatment $10 /$ e estimate $=$ exp;
contrast 'Dysport $8 \mathrm{U} / \mathrm{kg}$ versus Dysport $2 \mathrm{U} / \mathrm{kg}^{\prime}$ Treatment $0 \mathrm{l} /$ e estimate $=$ exp;
/* p -values and odds ratio by treatment group */
ods output Nobs $=$ Nobs Oddsratioswald $=$ Oddsratios Contrastestimate $=$ Contrasts Type3 $=$ Type3 ConvergenceStatus $=$ convstat CumulativeModelTest $=$ Propval;
run;
quit;
In addition, a summary table will present the number and percent of subjects within each response category at Week 6 by treatment group.

## Missing Values

In the view of registration in US only, two sensitivity analyses of the first secondary efficacy endpoint will be performed on the population of all randomised subjects in order to assess the impact of missing data on the conclusion. Details are provided in section 3.2.4.1.

### 3.2.2.5 Tertiary Efficacy Analysis

For tertiary efficacy endpoints summary tables will present descriptive statistics across all treatment cycles for fixed dose Treatment Cycle 1 as well as for repeat Treatment Cycles. For fixed dose Treatment Cycle 1 tertiary efficacy endpoints will be analysed in addition according to their scale (categorical or continuous), using ANCOVA/ANOVA on the rank, ANCOVA or Logistic regression for Treatment Cycle 1 up to Week 16 (inclusive). For any additional visits of Treatment Cycle 1 (any visits after Week 16) and also for all analyses by repeat Treatment Cycle, only descriptive statistics will be performed.
In the following list, the term 'all post-treatment visits' refers to data from each visit at each treatment cycle (Treatment Cycles 1, 2, 3 and 4), unless it is specifically stated that it relates only to visits from the fixed dose Treatment Cycle 1. Also where the term 'except Week 6' is utilised for analyses of Treatment Cycle 1, it only means that this is already a specified primary or secondary endpoint, not that it will not be analysed.

- Mean change from Baseline to all post-treatment visits of Treatment Cycle 1 (except Week 6) in MAS score in the Treatment Cycle 1 PTMG: ANCOVA model on ranked changes with treatment group, the baseline MAS score, the two stratification factors (age range and BTX naïve or non-naïve status as assessed at baseline), and the centre as fixed effects.
- Mean change from Baseline to all post-treatment visits in MAS score in each injected muscle group (elbow, wrist and finger flexors) of the study limb: ANCOVA model on ranked changes with treatment group, the baseline MAS score in the injected muscle group, the two stratification factors, and the centre as fixed effects for Treatment Cycle 1; descriptive statistics for analyses by Treatment Cycle 1 to 4 .
- Mean PGA score at all post-treatment visits (except Treatment Cycle 1, Week 6): ANOVA model on the rank with treatment group, the two stratification factors, and the centre as fixed effects for Treatment Cycle 1; descriptive statistics for analyses by Treatment Cycle 1 to 4 .

- Mean GAS score at all post-treatment visits (except Treatment Cycle 1, Week 6): ANOVA model on the GAS score with treatment group, the two stratification factors, and the centre as fixed effects for Treatment Cycle 1; descriptive statistics for analyses by Treatment Cycle 1 to 4.


- Mean change from Baseline to both post-treatment PedsQL scores (Generic core scale and CP module); ANCOVA model with treatment group, the baseline score, the two stratification factors, and the centre as fixed effects for Treatment Cycle 1; descriptive statistics for analyses by Treatment Cycle 1 to 4.

For ANCOVA/ANOVA models on the rank the same output will be presented as described in 3.2.2.1 and 3.2.2.3.
In ANCOVA models on the non-transformed original values an estimate of the magnitude of the difference between the treatment groups (Least Square Means Difference Dysport dose ( $8 \mathrm{U} / \mathrm{kg}$ and $16 \mathrm{U} / \mathrm{kg}$ ) Dysport $2 \mathrm{U} / \mathrm{kg}$ ) will be presented
together with a p-value and a $95 \% \mathrm{CI}$ to illustrate the precision of the estimated treatment groups' difference. Least Square Means together with their SE and $95 \%$ CI will also be reported in each treatment group. Additionally, for all other effects but the centre taken into account in the ANCOVAs, the respective type III test pvalue will be presented.
Logistic regression analyses will be run using the PROC LOGISTIC procedure with a Type III test. The odds ratios between the treatment groups (Dysport dose ( $8 \mathrm{U} / \mathrm{kg}$ and $16 \mathrm{U} / \mathrm{kg}$ ) / Dysport $2 \mathrm{U} / \mathrm{kg}$ ) will be presented together with a p-value and a $95 \%$ CI.

Additionally, for all other effects but the centre taken into account in the logistic regression models, the effect estimate, its $95 \% \mathrm{CI}$ and the respective p -value for the significance testing will be presented.
The $\mathrm{SAS}{ }^{\circledR}$ code for these models is as follows:
proc logistic data=data-set;
class Treatment (ref 'Dysport $2 \mathrm{U} / \mathrm{kg}$ ') age_range BTX_stratum centre; model response_variable (event='1') = Baseline Treatment age_range BTX_stratum centre/ clodds=wald; oddsratio 'Treatment' Treatment / cl=wald;
run;
quit;
The absence of responders (or of non-responders) in a given centre can lead to convergence issues. If a convergence issue appears, the logistic regression model won't take into account the parameter centre.
The centre effect will be described in tables showing the proportion of responders and non-responders by centre.
In addition, a shift table from baseline to each visit will be presented for the MAS score and TS spasticity grade (Y).
For the GAS responder an analysis for the primary goal will also be performed. A subject will be defined as a responder if their primary goal (identified as "very important") reaches an outcome of 0 (expected outcome) or higher at any time posttreatment during the treatment cycle. The proportion of GAS responders will be evaluated using a logistic regression model with treatment group, age range, BTX naïve or non-naïve status as assessed at baseline and the centre as explanatory variables, using the LOGISTIC code above. The responder analysis will be repeated on the number of subjects who reached for their primary goal an outcome of 1 (somewhat more than expected outcome) or higher as well as an outcome of 2 (much more than expected outcome).
A responder analysis will also be performed on each of the goals, using those subjects who selected the specified goal (regardless of whether it was their primary goal) and the rating of the goal during the treatment cycle. Due to the low number of subjects per goal, only descriptive statistics will be provided.
For each goal, the number and percentage of subjects with each rating will be tabulated by baseline importance and difficulty and in total. The number and percentage of subjects choosing each goal at baseline of each Treatment Cycle will be tabulated by importance and difficulty and in total for each Treatment Cycle.

### 3.2.2.6 Figures on Efficacy Endpoints

Figures will show the LS means and $95 \%$ CIs for each treatment group, at each scheduled assessment up to Week 16, for MAS, PGA, GAS, CCI and each PedsQL score. Forest plots of effect size by subgroups (Section 3.2.2.7) will also be provided for the primary efficacy endpoint. Histograms will present the number and percent of subjects within each MAS change category and within each PGA response category at Week 6 by treatment group.

### 3.2.2.7 Subgroup Efficacy Analyses and Covariates

Covariates used in models of efficacy analysis will be the same as those mentioned in sections 3.1.1 and 3.1.2.
The model will be run including the centre effect, which will be removed if the model does not converge.
The following additional subgroup analyses will be conducted on the MAS and the PGA of the mITT population:
Primary (MAS) and First Secondary (PGA) Efficacy Endpoint

- Age group (2 to 9 years and 10 to 17 years)
- BTX status at baseline (naïve or non-naïve)
- $\quad$ Sex (Male or Female).

MAS and PGA at Treatment Cycle 1 Week 16

- Physiotherapy/Occupational therapy status at Week 16 (No/Yes): Subjects without physiotherapy nor occupational therapy before week 16 of Treatment Cycle 1 versus subjects with physiotherapy and/or Occupational therapy between Baseline and Week 16 of Treatment Cycle 1.
Statistical analyses will include:
- A summary table of raw values and changes from baseline to all visits, by treatment group and overall, in each subgroup separately.
- A rank ANOVA model (score= subgroup_indicator + treatment + BTX stratum + age group + interaction subgroup $*$ treatment + centre) or rank ANCOVA model (change $=$ baseline + subgroup_indicator + treatment + BTX stratum + age group + interaction subgroup * treatment + centre).
Following contrast analyses for reporting will be performed in case the p -value from the interaction term is deemed statistically significant (lower than 0.1 ):
i. The Least Square Mean (LSMeans) of change from baseline in each subgroup, for each treatment group separately, together with its $95 \%$ CI,
ii. Difference in LSMeans in each subgroup between each active dose and Dysport $2 \mathrm{U} / \mathrm{kg}$, together with its $95 \% \mathrm{CI}$ and the p -value of the test $\mathrm{H}_{0}$ :Adjusted Mean Dysport 8 and $16 \mathrm{U} / \mathrm{kg}$ ) $=$ Adjusted Mean Dysport $2 \mathrm{U} / \mathrm{kg}$.
The ANOVA or ANCOVA models will only be run if there are at least 20 subjects in at least one treatment group. 20 subjects was deemed to be a reasonable number of subjects in order for the analyses to be considered to be meaningful rather than being calculated using any formal statistical methodology.


### 3.2.3 Safety

All safety data will be included in the safety data listings and summary tables will be based on the safety population. Across all treatment cycles summary safety tables
will be presented by the dose received in the study limb in the specified Treatment Cycle. For the fixed dose Treatment Cycle 1 selected tables will also be presented by exact dose received. For analyses over repeat treatments by Treatment Cycle, selected tables will also be presented by total body dose received.
Safety tables will be presented by the treatment groups specified in Section 3.2.1.2.

### 3.2.3.1 Adverse Events

For AEs, the sponsor will use the latest version of Medical Dictionary for Regulatory Activities (MedDRA) in effect within the sponsor company at the time of database lock.
Adverse events will be recorded from time of informed consent until the end of study and all AEs will be considered for inclusion in the analyses.
All AEs reported during the study will be presented in a listing which will be sorted by subject identifier (subject ID), the AE start and end date, primary system organ class (SOC), preferred term (PT) and verbatim text. TEAEs will be assigned to the last Study Treatment prior to the onset of the AE. The Treatment Cycle, the Study Limb Dose, and the Total Body Dose at which each AE started will be included.
Serious AEs, AEs leading to withdrawal, death, and TEAEs will be flagged in the AE listings.
Listings of all serious adverse events (SAE), AEs leading to withdrawal and deaths reported during the study will also be presented, using the same sort order. Listings of AEs of special interest will also be provided, for remote spread of effects as well as for hypersensitivity reactions.
A TEAE is defined as any AE that occurs during the treatment phase of the study if:
(1) it was not present prior to receiving the first intake of study medication, or
(2) it was present prior to receiving the first intake of study medication but the intensity increased during the treatment phase of the study.
(3) it was present prior to receiving the first dose of study treatment, the intensity is the same but the drug relationship became related during the active phase of the study.
A TEAE that occurs under a particular treatment cycle and worsens in intensity under a different treatment cycle will be considered as treatment emergent under the two treatment cycles. In the event of another occurrence of a TEAE with a change in intensity under a different treatment cycle, the subject will also be counted in that different treatment cycle. A given AE will be assigned to the dose received prior to the onset of the AE in the designated treatment cycle.
Adverse events of special interest (AESIs) for Dysport are TEAEs that suggest a possible remote spread of effect of the toxin or events suggestive of hypersensitivity like reactions. TEAEs due to possible remote spread of the effects of Dysport will be identified using the list of MedDRA PTs compatible with the mechanism of action of BTX-A and based on the recommendations from the Committee for Medicinal Products for Human Use (CHMP) and the Food and Drug Administration (FDA). TEAEs potentially representing hypersensitivity reactions will be identified using the Standardised MedDRA Query (SMQ) (narrow search query) for hypersensitivity reactions. A list of MedDRA PTs, used to identify any potential AESI, is provided in Appendix 8.4 of the SAP.

All TEAEs identified using the search strategy described above will be medically evaluated during the study, before the database lock and unblinding, by the sponsor to identify events which could possibly represent 'remote spread of effect of toxin', or which are suggestive of 'hypersensitivity reactions' due to study treatment administration. Cases will be excluded if they are confounded by presence of alternative clinical etiologies (medical history, concomitant medication or diagnosis which could account for the symptoms); if they are considered to be local effects instead of distant spread as judged by the site of injection; the time period between the last study treatment administration and event onset is not in accordance with the expected mechanism of action; or due to insufficient information/evidence to make an assessment.
In the TLFs, only the final list of AESIs confirmed by the sponsor as "a possible remote spread event" or "hypersensitivity reactions" will be taken into account.

Across all Treatment Cycles 1, 2, 3, and 4 an overall summary table of all AEs will be presented by treatment group for study limb dose (administered in the specified Treatment Cycle using the dose groups specified in Section 3.2.1.2), summarising:

- Any AE
- Any TEAE
- Any Non Serious TEAE
- Intensity of TEAEs (Severe, Missing, Moderate, Mild)
- Causality of TEAEs (Related, Unknown/Missing, Not related)
- Causality and intensity of TEAEs (Related and Severe, Related and Missing, Related and Moderate, Related and Mild, Missing and Severe, Missing and Missing, Missing and Moderate, Missing and Mild, Not related and Severe, Not related and Missing, Not related and Moderate, Not related and Mild)
- Any TEAE leading to withdrawal (TEAEWD)
- Any TEAE leading to death
- Any SAEs

In the above table, intensity, causality and causality combined with intensity of TEAEs, subjects will be presented in all the categories of intensity and causality in which their TEAE(s) have been reported.
Presentation by study limb dose will also include overall summary of all AEs for all treatment cycles combined.

In addition to the above, the following TEAE summary tables will be presented by treatment group for study limb dose across all treatment cycles (using the dose groups specified in Section 3.2.1.2 as administered in the specified Treatment Cycle):

- TEAEs with the number and percentage of subjects and the number of occurrences presented by primary SOC and PT
- TEAEs by intensity with the number and percentage of subjects and the number of occurrences by primary SOC and PT
- TEAEs by causality with the number and percentage of subjects and the number of occurrences by primary SOC and PT
- TEAEs by causality combined with intensity with the number and percentage of subjects and the number of occurrences by primary SOC and PT


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- SAEs with the number and percentage of subjects with SAEs and the number of occurrences by primary SOC and PT
- SAEs by intensity with the number and percentage of subjects and the number of occurrences by primary SOC and PT
- SAEs by causality with the number and percentage of subjects and the number of occurrences by primary SOC and PT
- SAEs by causality combined with intensity with the number and percentage of subjects and the number of occurrences by primary SOC and PT
- TEAEWDs with the number and percentage of subjects with TEAEWDs and the number of occurences by primary SOC and PT
- TEAEWDs by intensity with the number and percentage of subjects and the number of occurrences by primary SOC and PT
- TEAEWDs by causality with the number and percentage of subjects and the number of occurrences by primary SOC and PT
- TEAEWDs by causality combined with intensity with the number and percentage of subjects and the number of occurrences by primary SOC and PT
- Non serious TEAEs by treatment group, with the number and percentage of subjects with non serious TEAEs and the number of occurrences presented by primary SOC and PT, for all non serious TEAEs occurring for $\geq 5 \%$ of subjects in at least one treatment group at the PT level
- TEAEs by treatment group, with the number and percentage of subjects with TEAEs and the number of occurrences presented by primary SOC and PT, for all TEAEs occurring for $\geq 3 \%$ of subjects and more than 1 subject in at least one treatment group at the PT level
If a subject experiences more than one TEAE within a category (PT or primary SOC) the subject will be counted only once in that category.
In the summary of TEAEs by intensity and causality, in the event of multiple reports of the same PT for a subject, the maximum intensity (severe>missing $>$ moderate $>$ mild) and the most serious causality (related $>$ not related) will be counted.
For all AESIs the following selected tables will be produced by study limb dose group across all treatment cycles 1, 2, 3, and 4:
- Overall summary table of all AESIs
- AESIs with the number and percentage of subjects and the number of occurrences presented by primary SOC and PT
- AESIs by causality combined with intensity with the number and percentage of subjects and the number of occurrences by primary SOC and PT.


## TEAEs for fixed dose Treatment Cycle 1

In addition to the TEAE summary tables by study limb dose described above (including Treatment Cycle 1), the following tables will be produced by study limb dose group for those subjects who received the exact dose in the study limb (see Section 3.2.1.2). These tables will be provided for (TE)AEs at Treatment Cycle 1.

- Overall summary table of all AEs
- TEAEs with the number and percentage of subjects and the number of occurrences presented by primary SOC and PT


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- TEAEs by intensity with the number and percentage of subjects and the number of occurrences by primary SOC and PT
- TEAEs by causality with the number and percentage of subjects and the number of occurrences by primary SOC and PT
- TEAEs by causality combined with intensity with the number and percentage of subjects and the number of occurrences by primary SOC and PT
- SAEs with the number and percentage of subjects with SAEs and the number of occurrences by primary SOC and PT
- TEAEWDs with the number and percentage of subjects with TEAEWDs and the number of occurrences by primary SOC and PT
- TEAEs by treatment group, with the number and percentage of subjects with TEAEs and the number of occurrences presented by primary SOC and PT, for all TEAEs occurring for $\geq 3 \%$ of subjects and more than 1 subject in at least one treatment group at the PT level.


## AESIs for fixed dose Treatment Cycle 1

In addition to the AESI summary tables by study limb dose (including Treatment Cycle 1), the following tables will be for those subjects who received the exact study limb dose. These tables will be provided for AESIs at Treatment Cycle 1.

- Overall summary table of all AESIs
- AESIs with the number and percentage of subjects and the number of occurrences presented by primary SOC and PT
- AESIs by causality combined with intensity with the number and percentage of subjects and the number of occurrences by primary SOC and PT.


## TEAEs for Repeat Treatment

Summary tables by study limb dose across all Treatment Cycles $1,2,3$, and 4 will be provided as described above.
For Treatment Cycles 2, 3, and 4 the following tables by study limb dose will also be produced separately for subjects who received injections in study limb only and subjects who received injections in study limb plus any other limb (non-study upper limb and/or lower limb(s)):

- Overall summary table of all TEAEs
- TEAEs with the number and percentage of subjects and the number of occurrences presented by primary SOC and PT
- TEAEs by causality combined with intensity with the number and percentage of subjects and the number of occurrences by primary SOC and PT
- SAEs with the number and percentage of subjects with SAEs and the number of occurrences by primary SOC and PT
- TEAEWDs with the number and percentage of subjects with TEAEWDs and the number of occurrences by primary SOC and PT
Additionally, TEAEs by study limb dose across all Treatment Cycles 1, 2, 3, and 4 will be summarized by class of time elapsed from the last Dysport Dose injected to the event onset:
- 1-28 days (first 4 weeks)
- 29-56 days (from $>4$ to $\leq 8$ weeks)
- $57-84$ days (from $>8$ to $\leq 12$ weeks)


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- 85-112 days (from $>12$ to $\leq 16$ weeks)
- 113-140 days (from $>16$ to $\leq 20$ weeks)
- $\quad>140$ days ( $>20$ weeks).

Futhermore, the following TEAE tables for each Treatment Cycle will be produced by total body dose administered in the specified Treatment Cycle using the dose groups specified in Section 3.2.1.2.:

- Overall summary table of all AEs
- TEAEs with the number and percentage of subjects and the number of occurrences presented by primary SOC and PT
- TEAEs by intensity with the number and percentage of subjects and the number of occurrences by primary SOC and PT
- TEAEs by causality with the number and percentage of subjects and the number of occurrences by primary SOC and PT
- TEAEs by causality combined with intensity with the number and percentage of subjects and the number of occurrences by primary SOC and PT
- SAEs with the number and percentage of subjects with SAEs and the number of occurrences by primary SOC and PT
- TEAEWDs with the number and percentage of subjects with TEAEWDs and the number of occurrences by primary SOC and PT
- TEAEs by treatment group, with the number and percentage of subjects with TEAEs and the number of occurrences presented by primary SOC and PT, for all TEAEs occurring for $\geq 3 \%$ of subjects and more than 1 subject in at least one treatment group at the PT level.
For Treatment Cycles 2, 3, and 4 the following tables by total body dose will also be produced for subjects who received injections in study limb plus any other limb (non-study upper limb and/or lower limb(s)):
- Overall summary table of all TEAEs
- TEAEs with the number and percentage of subjects and the number of occurrences presented by primary SOC and PT
- TEAEs by intensity with the number and percentage of subjects and the number of occurrences by primary SOC and PT.


## AESIs for Repeat Treatment

In addition to the summary tables by study limb dose across all Treatment Cycles 1, 2, 3, and 4 the following AESI tables for each Treatment Cycle will be produced by total body dose administered in the specified Treatment Cycle using the dose groups specified in Section 3.2.1.2:

- Overall summary table of all AESIs, including also an overall summary of all AEs for all treatment cycles combined
- AESIs with the number and percentage of subjects and the number of occurrences presented by primary SOC and PT
- AESIs by causality combined with intensity with the number and percentage of subjects and the number of occurrences by primary SOC and PT-


### 3.2.3.2 Physical and Neurological Examinations

Clinically significant changes in the physical examination findings (abnormalities) will be recorded as AEs. Details of each neurological examination will be listed, by subject ID.

### 3.2.3.3 Laboratory Data

For clinical laboratory safety tests (clinical chemistry including serum alkaline phosphatase total and bone isoenzyme, and HbA 1 c ), all data will be listed, in standard international (SI) units, by subject ID and assessment visit, and all abnormal values will be flagged (High [H], Low [L], or clinically significant [C]).
A listing will be presented of all values for a subject with at least a clinically significant abnormal value.
A separate listing of normal ranges for SI units will be provided by gender and age where relevant.
Baseline will be defined as the last measurement collected prior to receiving the initial study treatment, Treatment Cycle 1 on Day 1. For the fixed dose Treatment Cycle 1 Baseline and Week 16 will be presented by Study Limb Dose. For Repeat Treatment Baseline and EOS/EW will be presented by Total Body Dose and subjects will be assigned to the treatment group according to the last study treatment received.
Summary statistics for all laboratory parameters by treatment group will be presented at each scheduled assessment (Baseline, Treatment Cycle 1 Week 16, and EOS/EW) for actual values and changes from baseline. The number and percentage of subjects with low, normal or high values will also be presented, for each treatment group, at each scheduled assessment. In addition, shift from Baseline tables of the number and percentage of subjects with low, normal or high values will be presented for each treatment group, at each scheduled assessment, and an overall summary of shift from baseline throughout the study will also be provided.
Results from urine and serum pregnancy tests will be listed by subject ID and assessment visit.

### 3.2.3.4 Vital Signs

Vital signs data (systolic and diastolic BP and HR) will be presented in a listing which will be sorted by subject ID and assessment visit. All abnormal values will be flagged (High (H) or Low (L)).
Baseline values for each treatment group will be defined as the last vital signs measurement collected prior to receiving the initial study treatment on Day 1 of Treatment Cycle 1. For the fixed dose Treatment Cycle 1 the summary table will be presented by Study Limb Dose. The tables for Repeat Treatment will be presented by Total Body Dose and subjects will be assigned to the treatment group in the designated Treatment Cycle according to the study treatment received in that cycle. For each treatment group, summary statistics will be presented for each scheduled assessment visit, for both actual values and changes from baseline. The number and percentage of subjects with low, normal or high values will also be presented, for each treatment group, at each scheduled assessment. In addition, shift from baseline to tables of the number and percentage of subjects with low, normal or high values will be presented for each treatment group, at each scheduled assessment.
The criteria thresholds for abnormal values are presented in section 8.1.

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In addition, body mass index (BMI) will be calculated using age in months at the time of the height and weight assessments. This will be included in the listing, and a shift from baseline table will present the number and percentage of subjects in Less than the 5th percentile, 5th Percentile to less than the 95th percentile, and Equal to or greater than the 95 th percentile categories for each treatment group, at each scheduled assessment. The criteria for BMI normal ranges are presented in section 8.2.

### 3.2.3.5 Electrocardiogram

All available ECG data and clinical interpretations will be listed by subject ID, treatment group, and assessment visit.
Subjects will have a set of three ECG recordings taken at Screening, Week 6 of Treatment Cycle 1 and EOS/EW. For each quantitative parameter (QTcB, QTcF, QT, PR, HR, RR, and QRS) the average of these recordings will be calculated. The average measurements will be used in all summary tables. In case of missing data for one or two ECG recordings of the three expected, the average will be performed on the values available.
In the listings the individual results (raw data) and the associated calculated average will be presented.
Baseline will be defined as the average of the ECG recordings collected at the last ECG assessment prior to receiving the initial study treatment, on Day 1 of Treatment Cycle 1. For fixed dose Treatment Cycle 1 the summary table will be presented by Study Limb Dose. For Repeat Treatment Baseline and EOS/EW will be presented by Total Body Dose and subjects will be assigned to the treatment group based on the dose received in the last Treatment Cycle.
Summary statistics of all ECG parameters (except QRS axis) will be presented by treatment group for each scheduled assessment visit, for both actual values and changes from baseline.
For interpretation of clinical significance (within normal limits; abnormal, not clinically significant; abnormal, clinically significant; not evaluable), a frequency table will be presented, by treatment group, at each scheduled assessment visit. A shift table from baseline to the Treatment Cycle 1 Week 6 and to the EOS/EW visit will also be presented.
Additionally, a frequency table will be presented for the worst value of all post-dose assessments (abnormal, clinically significant > abnormal, not clinically significant > not evaluable $>$ within normal limits). The number and percentage of subjects with duration of QT/QTc interval within the following three ranges of interest will also be presented, for both Fridericia's and Bazett's methods, by treatment group, for each scheduled assessment visit and an overall summary for any post-baseline visit:

- $\leq 450 \mathrm{msec}$
- $>450$ to 480 msec
- $>480$ to 500 msec
- $>500 \mathrm{msec}$.

The number and percentage of subjects with an increase from baseline in the QT/QTc interval of $>30-60 \mathrm{msec}$ and $>60 \mathrm{msec}$ will also be presented, for both Fridericia's and Bazett's methods, by treatment group, for each scheduled postbaseline assessment visit and an overall summary for any post-baseline visit.

An additional listing will display any QT/QTc intervals that fall within any of the ranges of interest for either absolute value or increase from baseline as described above.
The number and percentage of subjects with any of the following ECG abnormalities will be provided by treatment group for each scheduled assessment visit:

- New morphologies
- Arrhythmias
- Second and third degree heart block
- ST segment abnormalities
- T-wave abnormalities
- U-wave abnormalities
- Myocardial infarction
- Right bundle branch block
- Left bundle branch block
- Other conduction abnormalities
- Others (except abnormalities described above).


### 3.2.3.6 Presence of Antibodies to Botulinum Toxin Type A

See section 3.2.11 for details of the analyses for BTX-A-Abs.

### 3.2.3.7 Subgroup Safety Analyses

Additional subgroup analyses will be conducted on the Safety population across all treatment cycles for study limb dose and total body dose (using the dose groups specified in Section 3.2.1.2 as administered in the specified Treatment Cycle):

- Overall AE summary table
- Summary table by SOC and PT for TEAEs
- Summary table by SOC and PT for SAEs and TEAEWDs
- Summary table by SOC and PT and by intensity for TEAEs
- Summary table by SOC and PT and by causality for TEAEs
- Summary table for all TEAEs occurring for $\geq 3 \%$ of subjects and more than 1 subject in at least one treatment group at the PT level
by:
- $\quad$ Sex (Male or Female)
- $\quad$ Age group (2 9 years or $10 \quad 17$ years)
- Botulinum toxin status (Naïve or Non-naïve)
- BMI category (Less than the $5^{\text {th }}$ percentile or $5^{\text {th }}$ percentile to less than the $95^{\text {th }}$ percentile or equal to/greater than the $95^{\text {th }}$ percentile).
Shift from baseline tables of the number and percentage of subjects with low, normal or high values for alkaline phosphatase and HbA 1 c will be repeated by age group.


### 3.2.4 Missing Data and Outliers

### 3.2.4.1 Missing Data

## Efficacy

In order to assess the impact of the missing values of the primary efficacy endpoint for the withdrawals between the baseline visit and Treatment Cycle 1, Week 6 visit, the primary analysis performed on the assessed values of the primary efficacy endpoint will be completed with a sensitivitiy analysis performed on the population of all randomised subjects. Within that population, any missing assessment on the MAS at Treatment Cycle 1, Week 6 visit will be imputed with the assessment on the MAS at the baseline visit (conservative approach). In case any baseline assessment on the MAS is missing, the baseline assessment is imputed with the average baseline assessment on all randomised subjects.
The results of the sensitivity analysis will be taken into account to assess the robustness of the results of the primary analysis.

- In view of registration in the US only

In order to assess the impact of the missing values of the first secondary efficacy endpoint for the withdrawals between the baseline visit and the Treatment Cycle 1, Week 6 visit as well as for subjects not assessed in the mITT population, the primary analysis performed on the assessed values of the first secondary efficacy endpoint will be completed with the following two sensitivity analyses performed on the population of all randomised subjects:

- First sensitivity analysis: any missing assessment on the PGA at Treatment Cycle 1, Week 6 visit will be imputed with the assessment 'markedly worse' (intermediate conservative approach)
- Second sensitivity analysis: any missing assessment on the PGA at Treatment Cycle 1, Week 6 visit for a subject in a higher dose Dysport group will be imputed with the assessment 'markedly worse' and any missing assessment on the PGA at Treatment Cycle 1, Week 6 visit for a subject in the low dose Dysport group will be imputed with the assessment 'markedly improved' (most conservative approach).
The results of the two sensitivity analyses will be taken into account to assess the robustness of the results of the primary analysis.


## Safety

If a value required a retest (for laboratory values, vital signs and ECG) the closest non-missing reliable value to the scheduled visit will be used in the summary tables. An assessment will be considered reliable if it is performed without any technical problem and if the result is within the range of plausible values.
For adverse events with missing information for the intensity and causality the value will not be replaced and will be summarised as a separate category.

## All data

If there is a significant number of missing values for a subject (or if there is confirmed data appearing spurious), a decision will be made following consultation with the sponsor regarding the handling of these data in summaries, prior to breaking the blind.
Any repeat or additional assessments performed will be included in the individual subject data listings.
All issues relating to missing data will be discussed at the BDRM.

### 3.2.4.2 Missing or Incomplete Dates

In all listings, missing or incomplete dates should be left as they have been recorded. However, for calculation/sorting/assignation based on dates, the following methods will be used:
(1) The most conservative approach will be systematically considered (i.e. if the onset date of an $\mathrm{AE} /$ concomitant medication is missing/incomplete, it is assumed to have occurred during the study treatment phase (i.e. a TEAE for AEs) except if the partial onset date or the stop date indicates differently).
(2) Similarly, if the onset time of an AE is missing then a conservative approach will again be taken, so that it is assumed to be a TEAE unless the onset date, stop date, or stop time indicates differently.
(3) A missing/incomplete date of medical history or disease diagnosis will be assumed to have occurred before any study treatment.
(4) A medication with partial start and stop dates will be considered as concomitant treatment, except if the partial dates indicate differently.
(5) Where this is possible, the derivations based on a partial date will be presented as superior inequalities (i.e.: for an AE started in FEB2004 after the administration performed on 31JAN2004, the days since last dose will be " $\geq 2$ ", similarly the duration of ongoing AEs or medication will be " $\geq x x$ " according to the start and last visit dates).
(6) If an AE or SAE onset date is partial or missing, the event will be allocated to the first treatment where onset could have occurred (taking into account date and time stopped).
(7) If the start date of a medication is partial or missing, the medication will be assigned to the most recent treatment received on or before the medication start date (taking into account date stopped).

### 3.2.4.3 Outliers

In the event of any remaining unresolved data issues at the time of the BDRM, their impact on the statistical analyses will be assessed and any corrective action will be implemented prior to unblinding.

### 3.2.5 Subject Disposition

All disposition data will be included in the subject disposition listings and all summary tables for subject disposition will be based on the Randomised population, unless otherwise specified.
A listing of all visit assessment dates (relative days) will be presented by subject ID and Treatment Cycle. Subject disposition data (including date of informed consent/screening/randomisation/first study drug administration, last Treatment Cycle/last visit/status at end of study, and study duration will be listed by subject ID.
An overall summary of subject disposition by treatment group of Treatment Cycle 1 will be displayed for all screened subjects with the numbers and percentage of subjects screened, screen failures, randomised, randomised and treated, and the size of the mITT, PP and Safety populations. The numbers and percentage of subjects received study medication, completed Treatment Cycle, and withdrawn from the Treatment Cycle will be displayed by treatment group of each Treatment Cycle (1, 2, 3 and 4).

A summary table will also display the count and percent of subjects by country, country/centres (and country/pooled centres if needed) by treatment group of Treatment Cycle 1.
For the mITT population, a summary table will present by treatment group the number of subjects assessed at each Treatment Cycle and scheduled visit.
Counts and percents of subjects with any major protocol deviation and any major protocol deviation impacting the PP population will be tabulated by treatment group. Reasons for exclusion from the Safety, mITT and PP populations will be presented in summary tables by treatment group of Treatment Cycle 1 for the randomised and treated subjects.
All major protocol deviations identified prior to unblinding together with the reasons for exclusion from the analysis populations will be listed by subject ID. Also, any major protocol deviations impacting the PP population will be presented in an additional listing.
In addition to above, listings will present screening failures, violated inclusion criteria and fulfilled exclusion criteria, and randomisation information by subject ID. Screening failures and study withdrawals will also be listed by subject ID.
A summary table will present the overall study duration overall and by treatment group.

### 3.2.6 Withdrawals

All information on subject withdrawals will be included in the listings and all summary tables for subject withdrawals will be based on the randomised population. Discontinued subjects will be listed and a summary table of the number and percentage of subjects who withdrew from the study and the reasons for withdrawal will be presented by treatment group and overall and for each Treatment Cycle.

### 3.2.7 Demographic and Baseline Characteristics

All demographic data and data on baseline characteristics will be included in the listings and summary tables, listings will be based on the Randomised Population, tables will be based on the mITT population. Summary tables will be presented by treatment group of Treatment Cycle 1.
The overall summary table will be repeated for the Safety population. It will also be repeated for the PP population.
All demographic and baseline characteristics will be listed by subject ID. This includes:

- Demographics
- Neurological examinations
- Gross motor function classification system
- Tanner grading scale

Descriptive statistics will be provided for the following demographic and baseline characteristics, by treatment group:

- $\quad$ Sex (Male or Female)
- Race (Asian, Black / African American, Caucasian / White, Native Hawaiian / Other Pacific Islander, American Indian / Alaska Native, or Multiple Race)
- Ethnicity (Hispanic / Latino, Not Hispanic / Latino)
- Age (years)
- $\quad$ Age group (2 9 years or $10 \quad 17$ years)


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- Height (cm)
- Weight (kg)
- Body mass index $\left(\mathrm{kg} / \mathrm{m}^{2}\right)$
- Body mass index at baseline in categories (Less than the 5th percentile, 5th Percentile to less than the 95 th percentile, Equal to or greater than the 95 th percentile)
- Botulinum toxin status (Naïve or Non-naïve)
- Tanner grading scale (I, II, III, IV, or V)
- Baseline MAS score in the PTMG
- Baseline original MAS score in the PTMG ( $0,1,1+, 2,3,4$ )
- Baseline MAS score in the elbow flexors
- Baseline original MAS score in the elbow flexors ( $0,1,1+, 2,3,4$ )
- Baseline MAS score in the wrist flexors
- Baseline original MAS score in the wrist flexors ( $0,1,1+, 2,3,4$ )
- Baseline MAS score in the finger flexors
- Baseline original MAS score in the finger flexors ( $0,1,1+, 2,3,4$ )
- Geographical location (US or non-US)
- Gross motor function classification system level (1, 2 or 3 )

The descriptive statistics will also be repeated, on the mITT population, by each of the following subgroups:

- $\quad$ Sex (Male or Female)
- Age group (2 9 years or $10 \quad 17$ years)
- Botulinum toxin status (Naïve or Non-naïve)
- Geographical location (US or non-US)

Demographic and baseline characteristics will not be compared between treatment groups by formal statistical testing and only $95 \%$ CIs will be calculated.

### 3.2.8 Medical and Surgical History

All medical and surgical history data will be included in the listings and summary tables, listings will be based on the Randomised population and tables will be based on the mITT population.

### 3.2.8.1 Cerebral Palsy History

Descriptive statistics will be provided for the following:

- Type of paralysis (Hemiparesis, Paraparesis, Diparesis or Tetraparesis)
- Diagnosis of CP as defined by Rosenbaum [2] (Yes or No)
- Presence of severe athetoid or dystonic movements in the targeted upper limb (Yes or No)
- Intensity of athetoid or dystonic movements (Mild, Moderate or Severe)
- Hypertonia assessment tool responses (Positive or Negative responses to seven assessments designed to measure dystonia, spasticity and rigidity)
- Manual ability classification system level (MACS or mini-MACS) (1, 2, 3, 4 or 5).
Listings will present all data collected on subjects' CP history (including Hypertonia assessment tool [3] and MACs (or mini-MACS)) for the Randomised Population, by subject ID.


### 3.2.8.2 Other Significant Medical and Surgical History

Other significant medical and surgical history will be collected on the electronic case report form (eCRF), and will be coded using MedDRA.
Listings will present all data collected by subject ID, primary SOC, PT and verbatim text.
For all significant medical and surgical history a frequency table of the number and percentage of subjects will be provided by primary SOC and PT, for each treatment group of Treatment Cycle 1.

### 3.2.9 Study Exposure/Treatment Profile

All data on subject exposure will be included in the listings. A per subject listing will present for each study treatment the cycle duration (in days), study limb dose, non-study upper limb dose, lower limb dose, and total body dose in U/kg. Details of the study drug preparation and administration (date / time of administration, muscle targeting technique, any difficulties during drug administration, muscles injected by limb, volume and dose ( $\mathrm{U} / \mathrm{kg}$ ) administered) will be presented in a separate listing. The PTMG will be flagged.
Tables will be based on the safety population.

### 3.2.9.1 Summary of Exposure to IMP Across the Study

Across the study, irrespective of number of study treatments received, the following will be summarised by dose group using the study limb dose (as administered in Treatment Cycle 1, see Section 3.2.1.2 for dose groups):

- Summary statistics of duration of IMP exposure from initial Study Treatment 1 to EOS/EW
- Number and percent of subjects with duration between Study Treatment 1 and EOS/EW of:
a) $<16$ weeks
b) At least $16,22,28$, and $>48$ weeks.


### 3.2.9.2 Exposure During Fixed Dose Treatment Cycle 1 and over Repeat Treatments

The following will be summarised by dose group using the study limb dose for the fixed dose Treatment Cycle 1 (as administered in Treatment Cycle 1, see Section 3.2.1.2 for dose groups):

- Summary statistics of duration of treatment interval in weeks between initial Study Treatment 1 and Study Treatment 2, or EOS/EW
- Number and percent of subjects with duration between Study Treatment 1 and Study Treatment 2 or EOS/EW of:
a) $<16$ weeks
b) At least 16, 22, 28, and $>48$ weeks.

For Treatment Cycle 2, 3, and 4 corresponding summary statistics will be provided for treatment intervals and durations between Study Treatment 2 and 3 (or EOS/EW), and Study Treatment 3 and 4 (or EOS/EW). Summary tables will be presented by dose group using the study limb dose for Repeat Treatment (as administered in the specified treatment cycle, see Section 3.2.1.2).

### 3.2.9.3 Summary of Location of Treatment

For each Treatment Cycle (Treatment Cycle 1, 2, 3 and 4) and overall, the number and percent of subjects treated in each of the following categories will be presented
by dose group using the study limb dose (administered in the specified treatment cycle, using the dose groups specified in Section 3.2.1.2):

- $\quad$ Study limb (left or right)
- PTMG (elbow or wrist flexors)
- Study limb only
- Study limb and non-study upper limb
- Study limb and lower limb(s)
- Study limb, non-study upper limb and lower limb(s)

In addition summary statistics will be presented for dose administered to study limb, non-study upper limb, lower limb(s), and total body.
For Treatment Cycle 1 this will only include treatment of the study limb as no other limb could be treated.
The table will be repeated for all subjects having kept the same PTMG throughout the study.
Overall treatment cycles combined, summary statistics will be presented for the dose administered per treatment cycle to study limb, non-study upper limb, lower limb(s), and total body. Additionally, summary statistics will be presented for the average and cumulative dose administered per subject to study limb, non-study upper limb, lower limb(s), and total body.

For each Treatment Cycle (Treatment Cycle 1, 2, 3 and 4) and overall, the following will be summarised, regardless of PTMG:

- Number and percent of subjects treated in each upper limb and lower limb muscle. For the elbow flexors (brachialis and brachioradialis) and wrist flexors (flexor carpi radialis and flexor carpi ulnaris), this will be presented for each muscle as well as for each muscle group. The upper limb muscles will be presented separately for the study and non-study limb.
- Summary statistics for dose administered to each upper and lower limb muscle. The upper limb muscles will be presented separately for the study and non-study limb.
For Treatment Cycle 1 only the study limb will be treated, non-study upper limb and lower limb(s) can be treated at Treatment Cycle 2, 3, and 4.


### 3.2.9.4 Exposure to Specific Treatments

The following will be presented by study limb dose for subjects who received a Dysport Dose of 8 and/or $16 \mathbf{U} / \mathbf{k g}$.

- Number and percent of subjects receiving
a) At least 1 injection of study treatment
b) At least 2 injections of study treatment
c) At least 3 injections of study treatment
d) 4 injections of study treatment.
- Number and percent of subjects receiving
a) 2 consecutive injections of study treatment
b) 3 consecutive injections of study treatment
c) 4 consecutive injections of study treatment.

In addition for subjects who received a Dysport Dose of at least 8 or at least 16 $\mathbf{U} / \mathbf{k g}$ the number and percent of subjects receiving
a) 2 consecutive injections of study treatment within 6 months
b) 4 consecutive injections of study treatment within 12 months will be presented.

### 3.2.10 Prior and Concomitant Therapies

All data on prior and concomitant therapies will be included in the listings and summary tables, listings will be based on the Randomised Population and tables will be based on the mITT population.
For prior and concomitant medications the sponsor will use the latest version of the World Health Organisation Drug Dictionary (WHO-DD) in effect within the sponsor company at the time of database lock.

### 3.2.10.1 Botulinum Toxin History

The following listings will be presented:

- All subjects previously treated with BTX, by subject ID
- All previous BTX treatments, by subject ID, start date, treatment and reason, including all information recorded on the eCRF for each treatment (dose, average frequency of injection and duration)
- All side effects experienced during previous BTX treatment intake, by subject ID.
The number and percentage of subjects who received any previous BTX treatment at least once will be presented by treatment group of Treatment Cycle 1. This table will summarise also the number and percentage of subjects with any significant side effects experienced. Additionally, the indication for treatment will be summarised by treatment group and overall for the mITT population.


### 3.2.10.2 Other Prior and Concomitant Therapies (Medications and Non-drug Therapies)

Prior and concomitant medications will be coded according to WHO-DD. The therapeutic class will correspond to the second level of the Anatomical Therapeutic Chemical (ATC) code, i.e. corresponding to the first 3 figures.
Prior and concomitant non-drug therapies will be coded using MedDRA.
The date of Day 1 will be used as the cut off date for the definition of a prior and concomitant therapy, so a therapy that finished before Day 1 will be considered as prior and a therapy that started on or after Day 1 will be considered as concomitant. A therapy that started before Day 1 and is continuing will be considered as prior therapy.
Listings will be presented for each of the following:

- Prior and concomitant medications other than for spasticity
- Prior and concomitant non-drug therapies
- Prior and concomitant medications for spasticity.

The medications listings will be sorted by subject ID, start date, therapeutic class, preferred name and verbatim name, whilst the non-drug therapies listing will be sorted by subject ID, start date, SOC, preferred name and verbatim name. Therapies will be flagged as prior or concomitant in the listings. Separate listings will be provided for medications for spasticity and potentially prohibited concomitant medications.
For prior records the treatment group will be assigned based on Treatment Cycle 1.
For each of the above, the number and percentage of subjects will be provided by treatment group, with separate tables for prior and concomitant records, sorted by therapeutic class and preferred name for medications, and by SOC and PT for non-
drug therapies. Prior records will be counted under the dose of Treatment Cycle 1; for concomitant records the treatment group will be the most recent Dysport dose received on or before the medication or non-drug therapy start date for the Treatment Cycle.
Prior and concomitant surgical procedures will be coded using MedDRA. Listings will present all data collected sorted by subject ID, SOC, PT, verbatim text and date of surgery, for prior surgeries and concomitant surgeries separately.
Frequency tables of the number and percentage of subjects will be provided for prior and concomitant surgical procedures separately, by SOC and PT for each treatment group and overall for the mITT population.
The prior and concomitant use of orthoses and/or splints, physiotherapy and occupational therapy, and also home excercises will be summarised in frequency tables of the number and percentage of subjects for each treatment group and overall for the mITT population. Listings will also be produced, by subject ID, start date, affected limb (if applicable), and therapy.

### 3.2.11 Pharmacokinetics and Antibodies

All results from testing for presence of BTX-A-Abs (binding and neutralising) will be listed, sorted by subject ID and assessment visit. Two additional listings will be provided, one for all subjects with positive binding antibodies post baseline, one for all subjects with positive neutralizing antibodies post baseline. These listings will include the combined information about baseline BTX status, MAS and PGA results, and TEAEs for each subject.
Summary tables for positive/negative BTX-A-Abs with the number and percentage of subjects at baseline and at EOS/EW will be provided for both neutralising and binding antibodies. Additionally a shift table from baseline to the EOS/EW visit will be presented with the number and percentage of subjects separately for binding and neutralising antibodies. EOS/EW records will be counted under the dose of the last Treatment received.

### 3.2.12 Pharmacodynamics

Not applicable.

### 3.2.13 Derived Data

### 3.2.13.1 Age

Subject age (months) will be derived as (screening visit date birth date)/30.4375.

### 3.2.13.2 Body Mass Index

Body mass index $\left(\mathrm{kg} / \mathrm{m}^{2}\right)$ will be derived as Weight $(\mathrm{kg}) /(\mathrm{Height}(\mathrm{cm}) / 100)^{2}$ and rounded to the nearest decimal.
Body mass index classes are defined in section 8.2.

### 3.2.13.3 Therapeutic Class

The therapeutic class for medications corresponds to level 2 of the ATC code and will be derived as the first 3 characters of the ATC code.
The decoding of the therapeutic class will be done from the WHO-Drug Dictionary version in effect within the sponsor company at the time of database lock.

### 3.2.13.4 Changes from Baseline

Changes from baseline to any visit will be calculated as a difference from baseline (e.g. assessment at the visit assessment at baseline).

### 3.2.13.5 Adverse Event Duration

If the start and end dates of the AE are identical then " $<1$ " day will be presented with the duration in hh:mm recorded in the eCRF if it is available. If times are available, the duration will be calculated as (end date/time start date/time) and presented in days hh:mm. If at least one time is missing and if the duration is greater than 24 hours then it will be calculated as (end date - start date) +1 and presented in days. If the recorded end date is CONT. (for continuing), the end date will be listed as "ongoing" and the duration will be approximated as " $\geq$ (last attended visit date start date) +1 " day(s). If the start date or the end date are partial the duration will be presented as a superior inequality " $\geq x x$ " day(s) (i.e.: $\geq 2$ where start date $=$ 31JAN2004 and end date $=$ FEB2004 or start date $=$ JAN2004 and end date=01FEB2004]).

### 3.2.13.6 Adverse Event Episode Duration

If there are several episodes of the same AE then the end date of any episode prior to the last one will be imputed as (start date of the next episode 1 day) and the duration of the AE episode will be calculated using this imputed end date by the following formula (end date of the episode - start date of the episode) +1 .

### 3.2.13.7 Time since Study Treatment Administration for Adverse Event

If the start date of the AE is identical to the date of the study treatment administration, then" $<1$ day" will be presented with the time to onset in hh:mm recorded in the eCRF if it is available.
If times are available, the time will be calculated as (start date/time last administration date/time) and presented in days hh:mm.
If at least one time is missing and if the time to onset is greater than 24 hours then it will be calculated as (start date - last administration date) +1 and presented in days. If the start date is partial, the time since study treatment administration will be presented as a superior inequality (i.e.: for an AE started in FEB2004 after the only administration performed on 31JAN2004, the time will be presented as " $\geq 2$ " days). If the start date is missing the time since study treatment administration will not be presented.

### 3.2.13.8 Study Duration (all Treatment Cycles)

Study duration in weeks will be calculated as ((date of last visit attended screening visit date) +1) $/ 7$.

### 3.2.13.9 Treatment Cycle Duration

For subjects who are retreated at the end of a Treatment Cycle, the Treatment Cycle duration will be calculated, and presented in days, as:
Treatment Cycle Duration $=($ Date of retreatment $) \quad($ Treatment injection date $)$.
For subjects who are not retreated at the end of a Treatment Cycle, the Treatment Cycle duration will be calculated as:
Treatment Cycle Duration $=($ Treatment Cycle last attended visit date $) \quad$ (Treatment injection date) +1 .

### 3.2.13.10 Study Treatment Exposure (all Treatments)

Study treatment exposure in weeks will be calculated as ((date of last visit attended Treatment Cycle 1 injection date) + 1) / 7.

### 3.2.13.11 Treatment Cycle Exposure

For any of the Treatment Cycles, the Treatment Cycle exposure in weeks is calculated as:
(Last attended visit date in the Treatment Cycle Treatment Cycle injection date + 1) / 7.

### 3.2.13.12 Time Intervals between Treatments

For each Treatment Cycle the time interval between treatments will be calculated, and presented in days, as:
(Treatment injection date of the next Treatment Cycle - Treatment injection date) + 1

### 3.2.13.13 Time to Retreatment

Time to retreatment in weeks will be calculated as ((Date of Retreatment - injection date) +1$) / 7$.
Subjects who are never retreated will be censored at their last recorded visit for the study.

### 3.2.13.14 Concomitant Therapy Duration

If times are available, the duration of concomitant treatments/physiotherapy etc. will be calculated as (end date/time - start date/time). If at least one time is missing, the duration of concomitant treatments will be calculated as (end date - start date) +1 . If the recorded end date is CONT. (for continuing) then the end date will be listed as "ongoing" and the duration will be approximated as " $\geq$ (last attended visit date start date) +1 " day(s). If the start date or the end date are partial, the duration will be presented as an inequality " $\geq x x$ " day(s) (i.e.: $\geq 2$ where start date 31JAN2004 and end date=FEB2004 or start date=JAN2004 and end date=01FEB2004) but if both are partial or one is missing the duration will not be presented.

### 3.2.13.15 Study Day

Study day will be defined as ' -1 ' for the day prior to first study drug administration and as ' 1 ' for the day of first study drug administration (i.e. day 0 does not exist). If an event/assessment date was on or after first study drug administration then

Study day $=$ event/assessment start date study drug administration date +1 If an event/assessment date was before first study drug administration then

Study day $=$ event/assessment start date study drug administration date.

### 3.2.13.16 Treatment Cycle Day

If an event/assessment takes place/starts during Treatment Cycle X then the associated Treatment Cycle X day will be defined as:
Treatment Cycle X day $=($ event/assessment start date Treatment Cycle X study drug administration date) +1
For any Treatment Cycle, the Treatment Cycle day is defined as ' 1 ' for the day of study drug administration (i.e. day 0 does not exist).

The Treatment Cycle corresponding to the Treatment Cycle day will also be identified as follows and will be displayed jointly with the Treatment Cycle day in the listings:

- For Treatment Cycle 1: T1
- For Treatment Cycle 2: T2
- For Treatment Cycle 3: T3
- For Treatment Cycle 4: T4


### 3.2.13.17 Botulinum Toxin Treatment Duration

The duration of BTX treatments will be calculated as (end date - start date) +1. If the start date or the end date are partial, the duration will be presented as an inequality " $\geq x x$ " day(s) (i.e.: $\geq 2$ where start date 31JAN2004 and end date $=$ FEB2004 or start date $=$ JAN2004 and end date=01FEB2004) but if both are partial or one is missing the duration will not be presented.

### 3.2.13.18 Centre Post Pooling

For definition see section 3.2.16.

### 3.2.13.19 Modified Ashworth Scale

In order to perform the quantitative analyses on the MAS score, the original score ' $1+$ ' will be considered as the derived numeric score ' 2 ' and the higher original numeric scores will be incremented by one.
The below table summarises the correspondences between the original MAS scores and the derived MAS scores.

Table 9 Correspondence between Original MAS Scores and Derived MAS Scores

| Original MAS score | Derived MAS score |
| :--- | :--- |
| 0 | 0 |
| 1 | 1 |
| $1+$ | 2 |
| 2 | 3 |
| 3 | 4 |
| 4 | 5 |

### 3.2.13.20 Goal Attainment Scale

The GAS score is calculated as:
$50+\frac{10 \sum_{i=1}^{n} w_{i} x_{i}}{\sqrt{0.7 \sum_{i=1}^{n} w_{i}^{2}+0.3\left(\sum_{i=1}^{n} w_{i}\right)^{2}}}$
Where:

- $\quad x i=$ the rating of the $i$ th goal post-baseline $(-2$ : Much less than expected outcome, -1 : somewhat less than expected outcome, 0 : expected outcome, 1 : somewhat more than expected outcome, 2: Much more than expected outcome)
- $\quad$ wi $=$ the weight of the ith goal, calculated as importance * difficulty as defined at baseline.


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- Importance - 0: not at all important, 1: a little important, 2: moderately important, 3: very important
- Difficulty - 0 : not at all difficult, 1 : a little difficult, 2 : moderately difficult, 3 : very difficult
- $\quad \mathrm{n}=$ the number of goals assessed at baseline and post-baseline $[5,6]$


### 3.2.13.21 Pediatric Quality of Life Inventory ${ }^{T M}$

Each generic core scale (total scale score, physical health summary score and psychosocial health summary score) and each cerebral palsy specific score (Daily Activities, School Activities, Movement and Balance, Pain and Hurt, Fatigue, Eating Activities, and Speech and Communication) is calculated as follows:
(1) Individual item scores are reversed and transformed from a $0-4$ scale to a $0-100$ scale by assigning $0=100,1=75,2=50,3=25$ and $4=0$
(2) Each scale score is calculated as the sum of the transformed individual item scores, divided by the number of non-missing items
Note that a scale score is only calculated if at least $50 \%$ of the associated items are non-missing.
The items for each cerebral palsy specific score are identified on the eCRF. The generic core scales comprise the following sections:

- Physical health summary scale: Physical functioning scale
- Psychosocial health summary scale: Emotional, social and school functioning scales
- Total Scale: All scales [14, 15].


### 3.2.13.22 Electrocardiogram Average Result

For each quantitative ECG parameter the average result at each visit will be calculated as follows:
Average ECG result $=$ sum of non-missing results at that visit / number of nonmissing results at that visit.
3.2.13.23 Type of ECG Abnormality "Other Conduction Abnormalities"

That will gather all types of conduction abnormalities other than Left bundle branch block, Right bundle branch block, 2nd and 3rd degree AV block.

### 3.2.13.24 Class of ECG Abnormality "Other Abnormalities"

That will gather all abnormalities not categorized as MI, arrhythmia, ST abnormalities, T-wave abnormalities and U-wave abnormalities.

### 3.2.13.25 New Morphologies

New morphologies will include all morphology abnormalities occurring after baseline that were not present at baseline.
3.2.13.26 Special Interest Flag for $A E$

An AE of special interest is defined as described in section 3.2.3.1.

### 3.2.14 Visit Windows

All data will be organised and analysed according to the scheduled visits outlined in the protocol. However, if more than one record occurs within the same time interval where only one assessment is expected then the following rule should be applied: for pre-treatment assessments the last non-missing reliable result prior to study drug
administration will be used; for week 2 assessments, the closest non-missing reliable result to the scheduled visit will be used; for post-treatment assessments the closest non-missing reliable result to the scheduled visit will be used. An assessment will be considered reliable if it is performed without any technical problem and if the result is within the range of plausible values.

Table 10 Visit windows

| Study period | Scheduled visit | Visit Window (days) |
| :---: | :---: | :---: |
| Pre treatment | Screening | -7 to 1 |
| Treatment Cycle 1 | Baseline | 1 (prior to first dose) |
|  | Week 2 (Telephone contact) | 8 to 22 |
|  | Week 4 (Telephone contact) | 22 to 36 |
|  | Week 6 | 39 to 47 |
|  | Week 12 | 78 to 92 |
|  | Week 16 (Telephone contact) | 99 to 127 |
|  | Additional visits | Every 42 days ( $\pm 7$ days) |
| Treatment Cycles 2, 3, 4 | Day 1 | Treatment Cycle Day 1 |
|  | Week 2 (Telephone contact) | Treatment Cycle Day 8 to 22 |
|  | Week 4 (Telephone contact) | Treatment Cycle Day 22 to 36 |
|  | Week 6 | Treatment Cycle Day 39 to 47 |
|  | Week 12 | Treatment Cycle Day 78 to 92 |
|  | Week 16 (Telephone contact) | Treatment Cycle Day 99 to 127 |
|  | Additional visits | Every 42 days ( $\pm 7$ days) |

### 3.2.15 Rules and Data Formats

Data will be presented using an appropriate number of decimal places (i.e. the number of decimal places used does not imply undue precision). Raw data will be presented to the number of decimal places collected and derived data will be presented to an appropriate number of decimal places. The appropriate number of decimal places will be determined by general practice, mathematical rationale or scientific rationale (e.g. age should be presented in whole numbers).
Descriptive statistics will include $\mathrm{n}, \mathrm{n}$ missing, and:

- Mean, standard deviation, minimum, median, maximum and $95 \%$ CI for means for interval-type variables
- Counts and percents of each category for categorical nominal variables
- Both for categorical ordinal variables.

Mean, median, standard deviation and standard errors of the mean values will be reported to one decimal place greater than the raw/derived data that they summarise. Minimum and maximum values will be reported with the same precision as the raw data. Lower and upper CI values will be presented to one decimal place more than the raw/derived data (i.e. to the same number of decimal places as the mean). Percentages will be reported to one decimal place and $0 \%$ will not be presented. Percentages will be calculated using a denominator of all subjects in a specified population. The denominator will be specified in a footnote to the tables for clarification if necessary.

All values below or above a limit of detection (e.g. $<0.1$ or $>100$ ) will be listed as such. These values will not be included in any summary statistics.
All text fields must be left justified and numeric or numeric with some text specification (e.g. not done, unknown, $<4.5, \ldots$ ) must be decimal justified. Dates will be presented in the format ddMMMyyyy and times in the format hh:mm.

### 3.2.16 Pooling of Centres

It is not planned to perform a subgroup analysis on individual or groups of centres. In order to assure that the centre effect will be properly estimated in the statistical models, it is necessary to only consider the centres with a sufficient number of recruited subjects. Therefore, it has been decided to apply the following approach:

- the centres having recruited at least six subjects will be taken into account for the estimate of the centre effect.
- the centres having recruited less than six subjects will be pooled with one (or several) centre(s) within the same country (or across countries within the same region) until the number of subjects in the resulting pooled centre(s) is at least equal to six. Then, only the pooled centre(s) will be taken into account for the estimate of the centre effect.
With such an approach, all the centres (original or pooled) considered for the estimate of the centre effect will account for at least six recruited subjects.
The pooling of small centres will be confirmed at the BDRM prior to unblinding.
For the primary efficacy endpoint only, a sensitivity analysis will be conducted in order to investigate homogeneity of treatment response across centres.


### 3.2.17 Interim Analysis

No interim analysis will be performed.

### 3.2.18 Role of Data and Safety Monitoring Board

The DSMB will be composed of independent experts including one independent clinician who specialises in treating paediatric spasticity, one independent statistician and one independent pharmacovigilance expert. Data and Safety Monitoring Board meetings will take place as defined in the charter describing the operation of this committee and will depend on recruitment rate of the study. The first data review will take place after five subjects have been on treatment for at least 6 weeks or 4 months after the first subject has been randomised, whichever occurs first. Subsequent meetings will take place at intervals as defined by this committee.
Safety and efficacy data will be provided to the committee for their review. Possible recommendations that the DSMB can make regarding the conduct of the study are described in the charter. This includes recommending that the study is stopped for safety reasons.
The Chair of the DSMB will be responsible for communicating the committee's recommendations to Ipsen.

## 4 COMPUTER SYSTEMS, SOFTWARE AND VALIDATION OF PROGRAMS

### 4.1 Hardware

The statistical analysis will be performed under the Microsoft Windows operating system.

### 4.2 Software

All statistical analyses will be performed using SAS ${ }^{\circledR}$ Software version 9.4 or later (SAS Institute Inc., Cary, NC, USA).

### 4.3 Validation and QC (Quality Control) Plan

All SAS® programs are checked for logic by the developer and verifier, if applicable. The verification procedures used to ensure SAS ® programs work as intended are described in

All programs for the production of analysis datasets and tables, listings, and figures (TLFs) are double programmed by the verifier. Initial programming results and verification programming results are compared electronically. Tables and listings are double programmed and results of the initial programming and the verification programming are compared electronically. The verification process for figures may follow the double-programming process, or by confirming that data points contained in the plot are consistent against a source table or listing.
SAS ${ }^{(B)}$ CCl "Quality Control of SAS ${ }^{(8)}$ Programming" describes the quality control procedures that must be performed for all $\mathrm{SAS}^{\circledR}$ programs and outputs. Quality control is defined here as the operational techniques and activities undertaken to verify that the $\mathrm{SAS}^{\circledR}$ programs produce the proper clinical study output by checking for their logic, efficiency and commenting and by inspection of the produced output.
Individual output review is performed on all outputs by the statistical reviewer. It includes checking against mocks and checking for overall consistency and accuracy. In addition a Senior Biostatistical Reviewer performs high level review of the outputs to confirm statistical validity and compliance with the associated analysis plan.
A SAS® Programming and Quality Control Plan is prepared to document the methods of validation.
Copies of the QC documentation produced as confirmation that the validation process has been followed will be provided by CCl and will be retained by the sponsor.

### 4.4 Restitution of the Programs

All programs (including Macros and analysis datasets) producing the tables, listings and statistical output along with associated logs should be given to the sponsor when the tables, listings, figures and statistical analysis has been finalised.

## 5 CHANGES FROM PROTOCOL

- 'Treatment Cycle' is used instead of 'Treatment'
- According to the protocol listings will be sorted by treatment group and subject ID. As the treatment group for a subject can change during the course of the study, listings will be presented by subject ID instead.
- MAS responder analyses in injected muscle group (elbow, wrist and finger flexors) has been added to the tertiary efficacy endpoints.
- GAS responder analyses has been added to the tertiary efficacy endpoints
- Time to retreatment. The time from injection to retreatment (in weeks) will be summarized by treatment group and overall in the mITT population for subjects retreated at any time from the Week 16 visit onwards. Subjects who are not retreated are censored at the date of their last recorded visit in the treatment cycle or observational phase. Results from the Kaplan-Meier analysis will be obtained using the SAS® LIFETEST procedure. A summary table will present the results from the Kaplan-Meier analysis and will include the numbers of subjects at risk, censored and with an event (retreated) for each time interval, as well as the Kaplan-Meier estimates, the median time to event, and $95 \%$ CI. In addition, the Kaplan-Meier estimated survival functions will be plotted. Summary tables for the number and percentages of subjects retreated at each Treatment Cycle from Week 16 onwards and the time to retratment will also be displayed. An individual data listing will present the actual time to retreatment for each subject.
- The sensitivity analysis on the primary and first secondary endpoint to assess the impact of missing values will be performed on the full population of all randomised subjects instead of the population of all randomised subjects who received at least one injection of study treatment.
- According to the study protocol the theoretical maximum dose for the study limb was 640 U in the $16 \mathrm{U} / \mathrm{kg}$ group, however, due to the reconstitution of Dysport the maximum actual dose is 650 U .


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## 7 DATA PRESENTATION

Footnotes will be used to clarify ambiguities (e.g., the denominator used to calculate a percentage). Footnotes will be presented on each page of each table and listing; in case there is a high number of footnotes for a table or listing, footnotes can also be presented separately on the first page. The title of each generated table and listing will appear bookmarked within PDF (one single bookmark per table/listing) to allow document publishing by the Sponsor. Table \& Listings templates are provided in a separate document. The tables and listings will be presented in A4 landscape, in a fixed font (Courier New) with a size as 8 and according to the standard margins defined in 080259-SOP and 36280-FOR.
All tables, in table number order, will be presented in a bookmarked PDF. These should also be presented in a file per section (both formats) depending on the file size (not greater than 100 MB ). The same applies to listings.

### 7.1 Listings Index

The numbering of the listings will be such that they can be easily integrated into the Clinical Study Report following ICH Section 16.2.


The numbering of the tables will be such that they can be easily integrated into the Clinical Study Report following ICH Section 14.



### 7.4 Statistical Appendix

A Statistical Appendix for inclusion in the study report will be provided. All the methods used in checking the assumptions of the analyses and conclusions should be included and explained. Transformation of the data or other methods used for the statistical analysis other than the ones detailed in the SAP will be described and the change will be justified. All the $\mathrm{SAS®}$ output will be included without reworking the data (raw output).
For the ANCOVA and ANOVA, the output of the MIXED procedure within SAS ${ }^{\circledR}$ will be presented. This will include the overall ANCOVA/ANOVA table, parameter

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estimates, least square means for the treatment group with 95\% CIs and the associated p-values.This output should contain the study number, the date, the number of pages printed by $\mathrm{SAS}^{\circledR}$ and the table number to which it refers. Any other relevant information (e.g. statistical references...) will be added in the Statistical Appendix.



## 8 APPENDICES

### 8.1 Vital Signs Normal Ranges

### 8.1.1 Heart Rate

Table 11 Heart rate normal ranges (bpm)

| Age range (years) | Low | Normal | High |
| :--- | :--- | :--- | :--- |
| $2-<6$ | $<80$ | $80-140$ | $>140$ |
| $6-<12$ | $<60$ | $60-120$ | $>120$ |
| $\geq 12$ | $<50$ | $50-100$ | $>100$ |

### 8.1.2 Blood Pressure

Table 12 Blood pressure normal ranges

| Age (years) | Systolic blood pressure |  | Diastolic blood pressure |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | Low | Normal | High | Low | Normal | High |
| $2-3$ | $<80$ | $80-120$ | $>120$ | $<35$ | $35-70$ | $>70$ |
| $4-6$ | $<80$ | $80-120$ | $>120$ | $<45$ | $45-80$ | $>80$ |
| $7-10$ | $<85$ | $85-120$ | $>120$ | $<50$ | $50-80$ | $>80$ |
| $11-12$ | $<90$ | $90-130$ | $>130$ | $<55$ | $55-85$ | $>85$ |
| $\geq 13$ | $<90$ | $90-140$ | $>140$ | $<60$ | $60-90$ | $>90$ |

### 8.2 Body Mass Index Normal Ranges

Table 13 BMI categories

| Weight Status Category | Percentile Range |
| :--- | :--- |
| Underweight | Less than the 5th percentile |
| Healthy weight/ Overweight | 5th percentile to less than the 95th percentile |
| Obese | Equal to or greater than the 95th percentile |

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|  | Boys |  |  | Girls |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age (months) | Underweight: BMI < | Healthy weight/ <br> Overweight: <br> BMI [ ; [ | Obese : BMI >= | Underweight: BMI < | Healthy weight/ <br> Overweight: <br> BMI [ ; [ | Obese : BMI >= |
| 53.5 | 13.94003 | 13.94003; 17.82544 | 17.82544 | 13.62231 | 13.62231; 18.07486 | 18.07486 |
| 54.5 | 13.92353 | 13.92353; 17.83295 | 17.83295 | 13.6058 | 13.6058; 18.09289 | 18.09289 |
| 55.5 | 13.90771 | 13.90771; 17.84349 | 17.84349 | 13.58997 | 13.58997; 18.1137 | 18.1137 |
| 56.5 | 13.89257 | 13.89257; 17.85699 | 17.85699 | 13.5748 | 13.5748; 18.13722 | 18.13722 |
| 57.5 | 13.87809 | 13.87809; 17.87335 | 17.87335 | 13.56031 | 13.56031; 18.16341 | 18.16341 |
| 58.5 | 13.86426 | 13.86426; 17.89252 | 17.89252 | 13.54649 | 13.54649; 18.19221 | 18.19221 |
| 59.5 | 13.85108 | 13.85108; 17.9144 | 17.9144 | 13.53336 | 13.53336; 18.22355 | 18.22355 |
| 60.5 | 13.83855 | 13.83855; 17.93893 | 17.93893 | 13.52091 | 13.52091; 18.25738 | 18.25738 |
| 61.5 | 13.82665 | 13.82665; 17.96602 | 17.96602 | 13.50915 | 13.50915; 18.29365 | 18.29365 |
| 62.5 | 13.81537 | 13.81537; 17.99562 | 17.99562 | 13.49808 | 13.49808; 18.3323 | 18.3323 |
| 63.5 | 13.80472 | 13.80472; 18.02764 | 18.02764 | 13.4877 | 13.4877; 18.37327 | 18.37327 |
| 64.5 | 13.79469 | 13.79469; 18.06201 | 18.06201 | 13.47802 | 13.47802; 18.41651 | 18.41651 |
| 65.5 | 13.78527 | 13.78527 ; 18.09868 | 18.09868 | 13.46903 | $13.46903 ; 18.46197$ | 18.46197 |
| 66.5 | 13.77646 | 13.77646; 18.13758 | 18.13758 | 13.46075 | $13.46075 ; 18.50959$ | 18.50959 |
| 67.5 | 13.76825 | 13.76825; 18.17863 | 18.17863 | 13.45317 | 13.45317; 18.55932 | 18.55932 |
| 68.5 | 13.76065 | 13.76065; 18.22179 | 18.22179 | 13.4463 | 13.4463; 18.61111 | 18.61111 |
| 69.5 | 13.75364 | 13.75364; 18.26698 | 18.26698 | 13.44013 | 13.44013; 18.6649 | 18.6649 |
| 70.5 | 13.74724 | 13.74724; 18.31416 | 18.31416 | 13.43467 | 13.43467 ; 18.72064 | 18.72064 |
| 71.5 | 13.74144 | 13.74144; 18.36325 | 18.36325 | 13.42991 | 13.42991; 18.77829 | 18.77829 |
| 72.5 | 13.73624 | 13.73624; 18.41421 | 18.41421 | 13.42587 | $13.42587 ; 18.83778$ | 18.83778 |
| 73.5 | 13.73164 | 13.73164; 18.46699 | 18.46699 | 13.42254 | 13.42254; 18.89907 | 18.89907 |
| 74.5 | 13.72764 | 13.72764; 18.52152 | 18.52152 | 13.41992 | $13.41992 ; 18.96211$ | 18.96211 |
| 75.5 | 13.72424 | 13.72424; 18.57775 | 18.57775 | 13.41801 | $13.41801 ; 19.02685$ | 19.02685 |
| 76.5 | 13.72145 | 13.72145; 18.63564 | 18.63564 | 13.41681 | $13.41681 ; 19.09324$ | 19.09324 |
| 77.5 | 13.71927 | 13.71927; 18.69513 | 18.69513 | 13.41632 | $13.41632 ; 19.16123$ | 19.16123 |
| 78.5 | 13.71769 | 13.71769; 18.75617 | 18.75617 | 13.41654 | $13.41654 ; 19.23077$ | 19.23077 |
| 79.5 | 13.71672 | 13.71672; 18.81872 | 18.81872 | 13.41748 | $13.41748 ; 19.30182$ | 19.30182 |
| 80.5 | 13.71637 | 13.71637; 18.88272 | 18.88272 | 13.41912 | 13.41912; 19.37432 | 19.37432 |
| 81.5 | 13.71663 | 13.71663; 18.94814 | 18.94814 | 13.42147 | 13.42147 ; 19.44822 | 19.44822 |
| 82.5 | 13.71751 | $13.71751 ; 19.01491$ | 19.01491 | 13.42453 | $13.42453 ; 19.52349$ | 19.52349 |

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|  | Boys |  |  | Girls |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age (months) | Underweight: BMI < | Healthy weight/ <br> Overweight: <br> BMI [ ; [ | Obese : BMI >= | Underweight: BMI < | Healthy weight/ <br> Overweight: <br> BMI [ ; [ | Obese : BMI >= |
| 83.5 | 13.71901 | 13.71901; 19.083 | 19.083 | 13.42829 | 13.42829; 19.60008 | 19.60008 |
| 84.5 | 13.72113 | 13.72113; 19.15236 | 19.15236 | 13.43276 | 13.43276; 19.67794 | 19.67794 |
| 85.5 | 13.72387 | 13.72387 ; 19.22295 | 19.22295 | 13.43793 | $13.43793 ; 19.75702$ | 19.75702 |
| 86.5 | 13.72724 | 13.72724; 19.29471 | 19.29471 | 13.4438 | 13.4438; 19.83728 | 19.83728 |
| 87.5 | 13.73124 | 13.73124; 19.36761 | 19.36761 | 13.45037 | $13.45037 ; 19.91867$ | 19.91867 |
| 88.5 | 13.73587 | 13.73587; 19.44161 | 19.44161 | 13.45764 | $13.45764 ; 20.00116$ | 20.00116 |
| 89.5 | 13.74113 | 13.74113; 19.51666 | 19.51666 | 13.4656 | 13.4656;20.08469 | 20.08469 |
| 90.5 | 13.74702 | $13.74702 ; 19.59272$ | 19.59272 | 13.47425 | $13.47425 ; 20.16923$ | 20.16923 |
| 91.5 | 13.75355 | 13.75355; 19.66974 | 19.66974 | 13.48359 | 13.48359; 20.25473 | 20.25473 |
| 92.5 | 13.76071 | $13.76071 ; 19.74769$ | 19.74769 | 13.49362 | 13.49362; 20.34116 | 20.34116 |
| 93.5 | 13.76852 | 13.76852; 19.82652 | 19.82652 | 13.50432 | 13.50432; 20.42846 | 20.42846 |
| 94.5 | 13.77695 | 13.77695; 19.9062 | 19.9062 | 13.51571 | 13.51571; 20.51661 | 20.51661 |
| 95.5 | 13.78603 | $13.78603 ; 19.98668$ | 19.98668 | 13.52777 | 13.52777 ; 20.60555 | 20.60555 |
| 96.5 | 13.79575 | 13.79575; 20.06793 | 20.06793 | 13.5405 | 13.5405;20.69525 | 20.69525 |
| 97.5 | 13.8061 | 13.8061; 20.1499 | 20.1499 | 13.5539 | 13.5539; 20.78568 | 20.78568 |
| 98.5 | 13.8171 | 13.8171; 20.23256 | 20.23256 | 13.56797 | $13.56797 ; 20.87678$ | 20.87678 |
| 99.5 | 13.82873 | 13.82873; 20.31587 | 20.31587 | 13.58269 | 13.58269; 20.96853 | 20.96853 |
| 100.5 | 13.84101 | 13.84101; 20.39979 | 20.39979 | 13.59807 | $13.59807 ; 21.06089$ | 21.06089 |
| 101.5 | 13.85392 | 13.85392; 20.48429 | 20.48429 | 13.6141 | 13.6141;21.15381 | 21.15381 |
| 102.5 | 13.86747 | 13.86747 ; 20.56933 | 20.56933 | 13.63077 | 13.63077 ; 21.24727 | 21.24727 |
| 103.5 | 13.88166 | 13.88166; 20.65487 | 20.65487 | 13.64809 | 13.64809; 21.34123 | 21.34123 |
| 104.5 | 13.89648 | 13.89648; 20.74089 | 20.74089 | 13.66605 | 13.66605; 21.43565 | 21.43565 |
| 105.5 | 13.91194 | $13.91194 ; 20.82733$ | 20.82733 | 13.68463 | $13.68463 ; 21.53049$ | 21.53049 |
| 106.5 | 13.92804 | $13.92804 ; 20.91417$ | 20.91417 | 13.70384 | 13.70384; 21.62573 | 21.62573 |
| 107.5 | 13.94476 | 13.94476; 21.00138 | 21.00138 | 13.72368 | 13.72368; 21.72133 | 21.72133 |
| 108.5 | 13.96212 | 13.96212; 21.08893 | 21.08893 | 13.74413 | $13.74413 ; 21.81725$ | 21.81725 |
| 109.5 | 13.9801 | 13.9801; 21.17677 | 21.17677 | 13.76519 | 13.76519; 21.91347 | 21.91347 |
| 110.5 | 13.99871 | 13.99871; 21.26488 | 21.26488 | 13.78685 | $13.78685 ; 22.00996$ | 22.00996 |
| 111.5 | 14.01795 | 14.01795; 21.35323 | 21.35323 | 13.80911 | $13.80911 ; 22.10667$ | 22.10667 |
| 112.5 | 14.0378 | 14.0378; 21.44178 | 21.44178 | 13.83197 | $13.83197 ; 22.20358$ | 22.20358 |

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|  | Boys |  |  | Girls |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age (months) | Underweight: $\mathbf{B M I}<$ | Healthy weight/ Overweight: BMI [ ; [ | Obese : BMI >= | Underweight: BMI < | Healthy weight/ Overweight: BMI [ ; [ | Obese : BMI >= |
| 143.5 | 14.94002 | 14.94002; 24.1475 | 24.1475 | 14.79484 | 14.79484; 25.16522 | 25.16522 |
| 144.5 | 14.97745 | 14.97745; 24.22985 | 24.22985 | 14.83262 | 14.83262; 25.25564 | 25.25564 |
| 145.5 | 15.01532 | 15.01532; 24.31172 | 24.31172 | 14.87073 | 14.87073; 25.34557 | 25.34557 |
| 146.5 | 15.05363 | 15.05363; 24.3931 | 24.3931 | 14.90914 | 14.90914; 25.43498 | 25.43498 |
| 147.5 | 15.09238 | 15.09238; 24.47397 | 24.47397 | 14.94784 | 14.94784; 25.52387 | 25.52387 |
| 148.5 | 15.13155 | 15.13155; 24.55434 | 24.55434 | 14.98682 | 14.98682; 25.61223 | 25.61223 |
| 149.5 | 15.17113 | 15.17113; 24.6342 | 24.6342 | 15.02607 | 15.02607; 25.70005 | 25.70005 |
| 150.5 | 15.21113 | 15.21113; 24.71352 | 24.71352 | 15.06559 | 15.06559; 25.78731 | 25.78731 |
| 151.5 | 15.25152 | 15.25152; 24.79232 | 24.79232 | 15.10535 | 15.10535; 25.87401 | 25.87401 |
| 152.5 | 15.2923 | 15.2923; 24.87058 | 24.87058 | 15.14535 | 15.14535; 25.96013 | 25.96013 |
| 153.5 | 15.33347 | 15.33347; 24.94829 | 24.94829 | 15.18558 | 15.18558; 26.04568 | 26.04568 |
| 154.5 | 15.37501 | 15.37501; 25.02545 | 25.02545 | 15.22602 | 15.22602; 26.13065 | 26.13065 |
| 155.5 | 15.41692 | 15.41692; 25.10206 | 25.10206 | 15.26666 | 15.26666; 26.21502 | 26.21502 |
| 156.5 | 15.45918 | 15.45918; 25.17811 | 25.17811 | 15.30749 | 15.30749; 26.2988 | 26.2988 |
| 157.5 | 15.50179 | 15.50179; 25.2536 | 25.2536 | 15.34849 | 15.34849; 26.38197 | 26.38197 |
| 158.5 | 15.54474 | 15.54474; 25.32853 | 25.32853 | 15.38966 | 15.38966; 26.46453 | 26.46453 |
| 159.5 | 15.58801 | 15.58801; 25.40289 | 25.40289 | 15.43098 | 15.43098; 26.54648 | 26.54648 |
| 160.5 | 15.63161 | 15.63161; 25.47668 | 25.47668 | 15.47244 | 15.47244; 26.62782 | 26.62782 |
| 161.5 | 15.67551 | 15.67551; 25.5499 | 25.5499 | 15.51403 | 15.51403; 26.70853 | 26.70853 |
| 162.5 | 15.71971 | 15.71971; 25.62256 | 25.62256 | 15.55572 | 15.55572; 26.78862 | 26.78862 |
| 163.5 | 15.7642 | 15.7642; 25.69464 | 25.69464 | 15.59752 | 15.59752; 26.86808 | 26.86808 |
| 164.5 | 15.80897 | 15.80897; 25.76616 | 25.76616 | 15.63941 | 15.63941; 26.94692 | 26.94692 |
| 165.5 | 15.85401 | 15.85401; 25.83712 | 25.83712 | 15.68136 | 15.68136; 27.02513 | 27.02513 |
| 166.5 | 15.89931 | 15.89931; 25.90751 | 25.90751 | 15.72338 | 15.72338; 27.1027 | 27.1027 |
| 167.5 | 15.94486 | 15.94486; 25.97734 | 25.97734 | 15.76544 | 15.76544; 27.17965 | 27.17965 |
| 168.5 | 15.99065 | 15.99065; 26.04662 | 26.04662 | 15.80753 | 15.80753; 27.25597 | 27.25597 |
| 169.5 | 16.03667 | 16.03667; 26.11535 | 26.11535 | 15.84964 | 15.84964; 27.33167 | 27.33167 |
| 170.5 | 16.0829 | 16.0829; 26.18353 | 26.18353 | 15.89175 | 15.89175; 27.40673 | 27.40673 |
| 171.5 | 16.12934 | 16.12934; 26.25117 | 26.25117 | 15.93385 | 15.93385; 27.48118 | 27.48118 |
| 172.5 | 16.17598 | 16.17598; 26.31828 | 26.31828 | 15.97592 | 15.97592; 27.555 | 27.555 |

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8.4 Adverse Events of Special Interest - Remote Spread of Effects

The following list of MedDRA PT names and codes (version 20.0) has been defined to identify any events which may possibly represent a remote spread of effect:

| PT Name | PT Code |
| :---: | :---: |
| Accommodation disorder | 10000389 |
| Areflexia | 10003084 |
| Aspiration | 10003504 |
| Botulism | 10006041 |
| Bradycardia | 10006093 |
| Bulbar palsy | 10006542 |
| Constipation | 10010774 |
| Cranial nerve palsies multiple | 10011314 |

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| Cranial nerve paralysis | 10061908 |
| :---: | :---: |
| Diaphragmatic paralysis | 10012725 |
| Diplopia | 10013036 |
| Dry mouth | 10013781 |
| Dysarthria | 10013887 |
| Dysphagia | 10013950 |
| Dysphonia | 10013952 |
| Dyspnoea | 10013968 |
| Extraocular muscle paresis | 10015829 |
| Eyelid function disorder | 10061145 |
| Eyelid ptosis | 10015995 |
| VIIth nerve paralysis (Low Level Term (LLT)) | 10050040 |
| Facial paresis | 10051267 |
| Hemiparesis | 10019465 |
| Hypoglossal nerve paresis | 10067129 |
| Hyporeflexia | 10021089 |
| Hypotonia | 10021118 |
| IIIrd nerve paresis | 10054202 |
| Ileus paralytic | 10021333 |
| IVth nerve paresis | 10054201 |
| Monoparesis | 10027925 |
| Muscular weakness | 10028372 |
| Paralysis | 10033799 |
| Paralysis flaccid (LLT) | 10033809 |
| Paraparesis | 10033885 |
| Paresis | 10033985 |
| Paresis cranial nerve | 10061911 |
| Pelvic floor muscle weakness | 10064026 |
| Peripheral nerve palsy | 10058530 |
| Peripheral paralysis | 10054808 |
| Pneumonia aspiration | 10035669 |
| Pupillary reflex impaired | 10037532 |
| Quadriparesis | 10049680 |
| Respiratory arrest | 10038669 |
| Respiratory depression | 10038678 |
| Respiratory failure | 10038695 |
| Speech disorder | 10041466 |
| Trigeminal nerve paresis | 10068008 |
| Urinary retention | 10046555 |
| Vision blurred | 10047513 |
| Vocal cord paralysis | 10047674 |
| Vocal cord paresis | 10049234 |
| Neuromuscular toxicity | 10062284 |
| Paralysis recurrent laryngeal nerve | 10033830 |
| Respiratory distress | 10038687 |
| Respiratory paralysis | 10038708 |

### 8.5 Study Limb Dose in Units

According to body weight and randomised or planned Dysport Dose in U/kg subjects will receive the following Dysport Dose in Units in the study limb (specified in Instuction Leaflet Dysport ${ }^{\circledR}$, version 7.0 01 March 2017):

| Dysport Dose $2 \mathrm{U} / \mathrm{kg}$ |  |
| :---: | :---: |
| Patient Weight (kg) | Dysport Dose in Units |
| 10 | 20 |
| 11 | 20 |
| 12 | 20 |
| 13 | 30 |
| 14 | 30 |
| 15 | 30 |
| 16 | 30 |
| 17 | 30 |
| 18 | 40 |
| 19 | 40 |
| 20 | 40 |
| 21 | 40 |
| 22 | 40 |
| 23 | 50 |
| 24 | 50 |
| 25 | 50 |
| 26 | 50 |
| 27 | 50 |
| 28 | 60 |
| 29 | 60 |
| 30 | 60 |
| 31 | 60 |
| 32 | 60 |
| 33 | 70 |
| 34 | 70 |
| 35 | 70 |
| 36 | 70 |
| 37 | 70 |
| 38 | 80 |
| 39 | 80 |
| 40 | 80 |

Dysport Dose 4 U/kg

| Patient Weight (kg) | Dysport Dose in Units |
| :---: | :---: |
| 10 | 40 |
| 11 | 40 |
| 12 | 50 |
| 13 | 50 |
| 14 | 60 |
| 15 | 60 |
| 16 | 60 |
| 17 | 70 |
| 18 | 70 |
| 19 | 80 |
| 20 | 80 |
| 21 | 80 |

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| 22 | 90 |
| :---: | :---: |
| 23 | 90 |
| 24 | 100 |
| 25 | 100 |
| 26 | 100 |
| 27 | 110 |
| 28 | 110 |
| 29 | 120 |
| 30 | 120 |
| 31 | 120 |
| 32 | 130 |
| 33 | 130 |
| 34 | 140 |
| 35 | 140 |
| 36 | 140 |
| 37 | 150 |
| 38 | 150 |
| 39 | 160 |
| 40 | 160 |


| Dysport Dose 8 U/kg |  |
| :---: | :---: |
| Patient Weight (kg) | Dysport Dose in Units |
| 10 | 80 |
| 11 | 90 |
| 12 | 100 |
| 13 | 100 |
| 14 | 110 |
| 15 | 120 |
| 16 | 130 |
| 17 | 140 |
| 18 | 140 |
| 19 | 150 |
| 20 | 160 |
| 21 | 170 |
| 22 | 180 |
| 23 | 180 |
| 24 | 190 |
| 25 | 200 |
| 26 | 210 |
| 27 | 220 |
| 28 | 220 |
| 29 | 230 |
| 30 | 240 |
| 31 | 250 |
| 32 | 260 |
| 33 | 260 |
| 34 | 270 |
| 35 | 280 |
| 36 | 290 |
| 37 | 300 |
| 38 | 300 |
| 39 | 310 |
| 40 | 320 |
|  |  |
|  |  |
|  |  |

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| Dysport Dose 16 U/kg |  |
| :---: | :---: |
| Patient Weight (kg) | Dysport Dose in Units |
| 10 | 160 |
| 11 | 180 |
| 12 | 190 |
| 13 | 210 |
| 14 | 220 |
| 15 | 240 |
| 16 | 260 |
| 17 | 270 |
| 18 | 290 |
| 19 | 300 |
| 20 | 320 |
| 21 | 325 |
| 22 | 350 |
| 23 | 375 |
| 24 | 375 |
| 25 | 400 |
| 26 | 425 |
| 27 | 425 |
| 28 | 450 |
| 29 | 475 |
| 30 | 475 |
| 31 | 500 |
| 32 | 500 |
| 33 | 525 |
| 34 | 550 |
| 35 | 550 |
| 36 | 575 |
| 37 | 600 |
| 38 | 600 |
| 39 | 625 |
| 40 | 650 |


[^0]:    PROTOCOL TITLE: A PHASE III, MULTICENTRE, DOUBLE BLIND, PROSPECTIVE, RANDOMISED, CONTROLLED, MULTIPLE TREATMENT STUDY ASSESSING EFFICACY AND SAFETY OF DYSPORT USED IN THE TREATMENT OF UPPER LIMB SPASTICITY IN CHILDREN

