Welcome to Year 2
Expanded SMA Dataset Implementation Project

Jo Bullivant
Project Manager

Joanna Das
Project Coordinator
Welcome Meeting Agenda

10:00  Introductions
10:05  Project overview, scope and purpose
10:10  The SMA Dataset
10:30  Support and expectations
10:40  Universal Registry Platform (URP) update
10:45  Q&A
11:00  Close
Introductions

TGDOC Chairs
• Craig Campbell
• Anna Ambrosini
• Nathalie Goemans

Core Project Team
• Jo Bullivant
• Joanna Das

Wider Project Team
• Victoria Hodgkinson
• Miriam Rodrigues
• Marcel Heidemann
• Anna Mayhew

★★ Year 2 Registries ★★
Year 2 Registries

1. Argentina (tbc) Maria Soledad Monges
2. Armenia Kristine Hovhannesyan
3. Bulgaria Kristina Kastreva
4. Colombia Claudia Sánchez
5. Croatia Nina Barisić
6. Egypt Sahar Hassanein
7. Georgia Nana Nino Tatishvili
8. Malaysia Teik-Beng Khoo
9. Norway Magnhild Rasmussen
10. Sweden Anne-Berit Ekström

Brief introductions:
• Name
• Role
• Registry type

TREAT-NMD Neuromuscular Network
SMA Dataset Expansion - Context

• New SMA therapies receiving regulatory approval
• Paradigm shift: Drug-specific phase 4 studies -> RWE from existing registries
  • Data collection, analysis and publication independent of industry filter
  • Wider data access
  • Avoid duplication of effort and non-comparable results

Nusinersen

Risdiplam

AVXS-101

TREAT-NMD Dataset

• Regulatory response
• Multiple/combination therapies
• Clinical burden
• Comparable and accessible data
• Reimbursement criteria
• Long term profile
TREAT-NMD GLOBAL SMA REGISTRY SURVEY 2019

Over 9100 patients represented

- 3% in North America
- 48% in Europe
- 27% in Asia
- 7% in South America
- 1% in Australasia

37 registries participated

- 46% clinician-entered
- 15% patient-entered
- 39% combination

- 15% patient organisations
- 19% hospital
- 54% university
- 4% government
- 8% other

- 29% SMA I
- 38% SMA II
- 30% SMA III
- 2% adult onset
- <1% undefined 5q

Prepared by Victoria Hodgkinson 2019
Expand the TREAT-NMD core SMA dataset to support affiliated registries in the collection of robust longitudinal data that (a) captures natural history, (b) measures the effectiveness of interventions and (c) informs standards of care for patients.

Selection Factors:
- Importance
- Value to post-marketing
- Validity of item
- Feasibility

Principles:
- Pre and post consultation with multiple stakeholders
- Openness and collaboration with other groups
- Pilot study to test real-life feasibility
- Phased and supportive approach

3 year project to support remaining registries with implementation (June 2019 – May 2022)
## Project Deliverables

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<th>Year 1</th>
<th>Year 2</th>
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<td>2. Financial bursaries for Y1 registries</td>
<td>8. Year 2 workshop for Curators</td>
<td>11. Year 3 workshop for Curators</td>
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<td>4. Year 1 workshop for Curators</td>
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<td>5. Outcome Measure Library</td>
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<td>6. Year 1 Project Report</td>
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### Project Timelines

**May 2017**
- Multi-stakeholder Workshop

**Jun 2018**
- Pilot feedback webinar
- Expanded Dataset v1 confirmed

**Aug 2018**
- Pilot Curators’ Workshop

**Sep 2018**
- Dataset dictionary development

**Oct 2018**
- Revision consultation launched

**Dec 2018**
- Dataset revisions begin

**Jan 2019**
- Year 1 begins

**May 2019**
- Y1 Dataset Workshop (Leiden)

**Dec 2019**
- Y1 telephone consultations

**May 2020**
- Year 1 ends
- OM Library available

**Jul 2020**
- Y1 Report Complete

**Aug 2020**
- Y2 Welcome Meeting

**Date tbc**
- v2 Dataset confirmed

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**Pilot Project**

**Implementation Year 1**

**Implementation Year 2**

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**TREAT-NMD Neuromuscular Network**
Original Core Dataset (v0)  Expanded Core Dataset (v1)

**Original Mandatory Items**
- Demographics
- Genetic test result
- Clinical diagnosis
- Best & current motor function
- SMA type
- SMN2 Copies
- Wheelchair use
- Clinical trials
- Pulmonary function
- Family history
- Feeding function
- Scoliosis surgery
- Participation in other registries

**Original Highly Encouraged Items**
- Clinical observations incl. contractures
- Screening programme & method of testing
- Airway clearance / secretion mobilisation
- TGI according to clinician
- Electrophysiology & biomarkers taken (Y/N)
- Date & cause of death
- Clinical observations incl. contractures
- Participation in other registries or NH studies

**Expanded Mandatory Items**
- Enrolment & consent
- Genetic diagnosis
- SMA type & onset age
- Best & current motor function extended
- SMN2 copies
- Scoliosis surgery
- FVC results if done
- Hospitalisations & co-morbidities
- Allopathic drugs
- § 1 validated motor outcome measure
- SMA type & onset age
- Family history incl. PPRL fields
- Demographics incl. HCP details
- Airway clearance / secretion mobilisation
- TGI according to clinician
- Electrophysiology & biomarkers taken (Y/N)

**Expanded Highly Encouraged Items**
- Living status
- HCP details
- Wheelchair use
- Feeding tube use
- IV & NIV use
- Therapeutic interventions
- Clinical trial participation
- Date & cause of death
- Clinical observations incl. contractures
- Participation in other registries or NH studies

**Core Dataset (v1)**
- 131 items
- 85 mandatory
- 37 ‘parent’ mandatory
Dataset revision

The SMA landscape is evolving rapidly and the dataset for our global registry needs to be able to adapt to the changing needs of the SMA community.

A formal dataset revision process reflects our commitment to:

1. ensuring that the dataset remains relevant, feasible, collaborative, harmonised with other initiatives, and responsive to the needs of the SMA community.
2. managing (and minimising wherever possible) the burden of dataset changes on all stakeholders.
3. supporting high quality data collection, global standards and continuous improvement.
v2 Dataset Modelling

- Clearer distinction between the dataset and an example data collection form
- Removed: anything not collected centrally (e.g. contact details, confirmation of consent, name of treating physician etc.)
- Clearer definitions; e.g. what exactly is meant by mandatory? Item? Value?
- Machine-readable format, stable and unique item ID’s, single source file, international standards (e.g. RFC 2119, ISO 8601)
- Complex areas: Example questions for data collection forms and example data representations to demonstrate best practise
- Meaningful and usable for software developers / IT colleagues (platforms or e-CRFs)

= Better quality and more standardised data
= Clearer guidance for registries on what to collect (but flexibility to collect it in a way to suit them)
= FAIRification of data within our registries
= Easier to view, understand, use, navigate the dataset

Demonstration of v2 format
Core SMA Dataset - clarifications

‘Mandatory’ items

- must be included in data collection forms (C-R / P-R / both)
- not necessarily a mandatory field – e.g. name of therapy
- if not mandatory; encouraged to collect if relevant and feasible

Outcome measures

- **Mandatory requirements:**
  - Motor function section of core dataset
  - ≥1 validated motor outcome measure per patient
  - Total Global Impression according to patient (1 question; how do they feel their condition has changed)
- **Optional:**
  - Additional motor outcome measures
  - Patient-reported outcome measure

**Revisions:** 6 months to implement
SMA Outcome Measure Library

• Quick-reference information tool, to help registries choose and implement the right OMs for their patients (open resource).

• We encourage independent decision-making. The best OM for any given patient can depend on many factors. Clinicians/registries should check for national or local guidelines, review the information in this library and elsewhere, and use professional judgement to identify measures which will:

  • pick up meaningful change in their patient cohorts and

  • be feasible for their registry to collect.

• Working document, will be updated as needed, check the project web page for the current version.

• Feedback, missing information, or suggestions for additional outcome measures can be provided by completing the short feedback form on the web page.
Core SMA Dataset – support and expectations

Why?
To support Curators to implement the new core SMA Dataset which can be time consuming and costly.

What support is available?
• Access to a network of registries and curators who have already successfully implemented the expanded dataset.
• Monthly project support drop-ins to access information and guidance from the project team and supporting experts.
• 2020 SMA Dataset Workshop.
• Additional resources available on the project webpage.
• Direct linkage with other TREAT-NMD Dataset projects (DMD and LGMD)

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<td>Thu 24 Sept 2020</td>
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<td>Thu 25 Feb 2021</td>
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<td>Thu 25 Mar 2021</td>
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<td>Thu 29 Apr 2021</td>
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Bursary

An **€8000 bursary** is available to registries taking part in the SMA Dataset Implementation Plan.

**Who is not eligible?**
Registries receiving financial support directly from Biogen for their data collection activities.

**How will it be paid?**
- Paid in two parts:
  - **Part A**: 50% (€4,000) is available when the registry starts work on implementing the expanded SMA Dataset (available immediately if work has already begun)
  - **Part B**: 50% (€4,000) is available when the registry provides:
    - evidence of all mandatory items being collected
    - feedback on the dataset and implementation process.

*Both parts can be claimed together if all part B conditions can already be met.*
Core SMA Dataset – support and expectations

What you will need to do:

• Commit to start collecting all relevant mandatory items in the expanded dataset by the end of May 2021.

• Keep us updated on progress

• Tell us if you experience difficulties in collecting any specific items

• Tell us how you use the bursary and how it has helped your registry

• Confirm/renew your TGDOC membership (core or affiliate)
Universal Registry Platform (URP) Update

Ben Watling (CEO, TREAT-NMD Enterprise)
URP Development

- TREAT-NMD Enterprise will lead on the URP development. Software developers have been appointed, build commenced on 10th August 2020.

- Will initially contain DMD & SMA modules, designed to capture the respective core datasets.

- For registries using the URP, data will remain under local governance and control.

- A Central Data Warehouse (CDW) will be built to house (de-identified) data submitted to TREAT-NMD.

- Data Sharing Agreements will be established for all registries providing data to TREAT-NMD, either directly (via the URP) or indirectly.

- TREAT-NMD will not have access to data within registries unless it has been submitted to CDW.
URP Completion Timelines

• Registries will be invited to ‘pilot’ the URP for their disease, in the beta –testing (user acceptance testing) phase. **Oct – Dec 2020.**

• Development, Build & Testing (for clinician entered data) will be complete **by December 2020.**

• A ‘Patient Portal’ will be added and the URP (for SMA & DMD) will be complete **by March 2021**

• The URP will ‘go live’ for use, available to TGDOC registries (clinician and patient entered) **from April 2021.**

• We will encourage as many TGDOC Registries as possible to use the URP as their own data collection platform, and it will be provided free of charge.

• Registries using other platforms will still be able to submit data for enquiries by uploading into the URP.

• **A further LGMD Disease Module will be built in Q3/4 2021.**
URP Benefits to TGDOC Registries

✓ Stable, high quality, disease-specific registry platform, free of charge. Full access to and control over own data.

✓ Access to data dashboards and reporting functionality to analyse their own registry data and view comparable summary data from other registries.

✓ Quality assured data-collection, within an independent and collaborative platform, regulator-approved.

✓ Simple and safe data submission for TGDOC Enquiries.

✓ Contribute standardised, high quality, reproducible data for the benefit of research, trial planning/recruitment and postmarketing surveillance; managed appropriately and responsibly through TREAT-NMD.

✓ Future expansion will allow for additional data capture (e.g. individual studies or research questions) to support wider stakeholder requirements whilst still under TGDOC governance.
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Questions?

(URP questions: Caroline.Ogden@treat-nmd.com)

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