

# An innovative international educational network to improve physicians' current management practices for cervical dystonia and spasticity

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## BACKGROUND AND OBJECTIVE

Botulinum neurotoxin type A (BoNT-A) is used to treat many neurological movement disorders associated with muscle hyperactivity, such as adult and children spasticity<sup>1,2</sup>, and adult cervical dystonia (CD)<sup>3</sup>. BoNT-A should only be injected by clinicians possessing in-depth knowledge, skills and practical experience in neurological rehabilitation<sup>4</sup>. Moreover, current medical practice in spasticity and CD appears to need clinical harmonization and better expertise dissemination<sup>5,6</sup>. Despite these educational requirements, existing guidelines focus on the efficacy of BoNT-A but do not provide clear guidance on injection practice<sup>7-9</sup>. Within Europe, to our knowledge, most regions have some local educational provision but no professional bodies oversee or regulate the quality of training.

Against this background, there is a clear need for a structured, global and high-level training offer in order for physicians injecting BoNT-A to be trained in the required skills and to receive up-to-date expertise.

The **Ixcellence Network**<sup>®</sup> aims to improve patient care in the fields of CD and spasticity through the development of a high level training program giving specialized physicians an opportunity to access best practices and clinical innovation across specialties. This international program provides physicians with a complete vision of the management of patients throughout their journey, with a special emphasis on practice.

## References

1. Baguley et al., Investigating muscle selection for botulinum toxin-a injections in adults with post-stroke upper limb spasticity, J Rehabil Med 2011
2. Strobl et al., Best Clinical Practice in Botulinum Toxin Treatment for Children with Cerebral Palsy, Toxins 2015
3. Albanese et al., Practical guidance for CD management involving treatment of botulinum toxin: a consensus statement, J Neurol 2015
4. Spasticity in adults: management using botulinum toxin — National guidelines, Royal College of Physicians, 2009
5. Tiderington et al., How Long Does it Take to Diagnose Cervical Dystonia? J Neurol Sci. 2013
6. Turner-Stroke et al., Results from the Upper Limb International Spasticity Study-II (ULISII): a large, international, prospective cohort study investigating practice and goal attainment following treatment with botulinum toxin A in real-life clinical management, BMJ, 2013
7. Simpson et al., Practice guideline update summary: Botulinum neurotoxin for the treatment of blepharospasm, cervical dystonia, adult spasticity, and headache, Report of the Guideline Development Subcommittee of the American Academy of Neurology, Neurology 2016
8. Hallett et al., Evidence-based review and assessment of botulinum neurotoxin for the treatment of movement disorders. Toxicon 2013
9. Albanese et al., EFNS guidelines on diagnosis and treatment of primary dystonias. Eur J Neurol 2011

## METHODS

### Program Direction and design

This training program was designed by a scientific committee composed of 6 international experts specialized in the management of CD and spasticity. Their mission was to create the general structure of the program, choose the centers and trainers, and define the themes and contents of every training courses in the program. Nine training centers were selected according to their clinical expertise and their innovative methods as well as experts training skills (Figure 1).

Figure 1 The Ixcellence Network<sup>®</sup>:

9 expert centers in innovative methods regarding patient management.



### Trainers, trainings format

Each expert center delivers a training focused on a specific aspect of the management of patients (diagnosis, assessment, treatment) or on a particular technique (EMG, ultrasonography). Trainings are composed of theoretical and practical sessions. The practical sessions predominate in terms of both time and contents, and include patient videos, patients consultations, treatment with BoNT-A injections and training sessions on the innovative approaches addressed. A universal slide deck composed of an up-to-date literature review is provided to trainers, offering a full educational kit refreshed every 2 years.

### Attendees profiling

Current training courses are aimed at the advanced level. Participants are selected for a specific training course according to their individual level of interest. Trainers are provided participant profiles in advance of each session to enable individualized training.

### Outcomes evaluation

Trainee feedback is collected at the end of each course and 6 months after completing the course. All trainee feedback were shared with trainers to improve the next training courses in an iterative manner. Course trainers are also interviewed to gain 360° feedback.

## RESULTS

From program launch in 2012 to June 2016

### Attendance

- **537 physicians have been trained** over 91 educational courses.
- Participants came from **36 countries**, mostly from the European Union (70% of participants).
- Approximately **30% of attendance has been for cervical dystonia courses, 20% for children spasticity and 50% for adult spasticity courses.**

### Educational outcomes

#### Long term impact on clinical practice (2013-2015)

Of the 155 physicians who provided feedback 6-months after attendance

**92%** confirmed that the training had changed their daily practice

**94%** confirmed that the course had an impact on their self-confidence

Overall, practice and self-confidence improvements were stated by trainees at the end of the course and confirmed 6 months later.

#### Trainers' opinion

14 trainers provided written feedback in 2015

- Regarding the selection of participants in the training, all trainers stated that the **trainees' level of expertise met their expectations.**
- **Groups were considered homogeneous** by 91% of the trainers.
- The **trainees' motivation was above expectations** for 31% of the trainers.
- 85% said that **interactions met or exceeded their expectations.**

### Discussion

- The educational outcomes of Ixcellence Network<sup>®</sup> are very encouraging. This training program should be viewed as an important step towards dissemination of best practice and innovative methods with regards to the use of BoNT-A in spasticity and CD. For physicians, it is especially important, as the amount of training a physician gets in this subspecialty is highly variable across Europe and the world<sup>7</sup>.
- This interactive and tailored approach, focused through small groups, allows sharing of best practice across specialties and improves physicians' skills and knowledge to the benefit of patients.

- Most of the practitioners selected were **neurologists and rehabilitation specialists (91%: 488 participants)**. A few representatives from other categories of health professionals (9% of participants) were also trained.

#### Trainees' general satisfaction

424 attendees gave their feedback between July 2013 and June 2016

**78%** reported an excellent level of satisfaction (the highest rating)

**94%** responded that the course was above average or excellent in meeting objectives

**92%** said they learnt something new

**90%** said that the information provided would change their daily practice

**93%** said that the information provided would benefit their patient care

In 2015, 97% of trainees gave the practical part of the trainings a rating of 4 or higher (on a scale from 1 to 5) versus 87% for the theoretical part.

## Conclusions

- **To the best of our knowledge, the Ixcellence Network<sup>®</sup> is the first international training program that targets physicians who already have some experience with BoNT-A injections in the fields of spasticity and cervical dystonia.**
- **Its most original features consist in gathering both specialties of neurology and rehabilitation and covering the entire patient management in the fields of spasticity and cervical dystonia, with a focus on practice.**
- **By attending the Ixcellence Network<sup>®</sup> training, attendees are able to further develop their specialist skills.**

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