香港運動障礙學會
THE HONG KONG MOVEMENT DISORDER SOCIETY

# 2022 Annual Scientific Meeting of The Hong Kong Movement Disorder Society

**22 October 2022 (Saturday)**
**Webinar**

## Program Book

# Contents

# Welcome Message by the President

**Dr Helen Yip**
President
The Hong Kong Movement Disorder Society

On behalf of the Hong Kong Movement Disorder Society (HKMDS), I would like to welcome you all to join our 2022 Annual Scientific Meeting (ASM). At the same time, I wish to acknowledge the hard work of the organizing committee of ASM for bringing this meeting to fruition.

2022 is a special year because it is the 3rd year for HKMDS launching a full virtual webinar ASM due to the COVID-19 global pandemic. Sadly, due to the ongoing pandemic, we cannot meet in person this year but I strongly believe that the scientific content as well as academic interactions will be retained and all participants will have a rewarding learning experience during this meeting.

This year, we have put together an interesting, comprehensive yet compact program in ASM 2022 with a cast of world-renowned international and local experts, meeting together to share their insights and the latest findings in movement disorders. There will also be a Video Game session with interactive elements which audiences can join a live quiz to test their knowledge on movement disorders.

In closing, I wish the HKMDS many more future success and accomplishments. Looking beyond this, the fight against movement disorders continues in clinical, research, hospital and community settings in Hong Kong as well as international.  It is my expectation that this meeting will further contribute to this main goal.

Thank you.

# Organizing Committee of the Hong Kong Movement Disorder Society 2022 Annual Scientific Meeting

| | |
|---|---|
| **CHAIRPERSON** | Dr Helen Yip |
| **VICE-CHAIRPERSON** | Dr Shirley Pang |
| **HON SECRETARY** | Dr Karen Ma |
| **HON TREASURER** | Dr Michael Lee |
| **Scientific Committee** | Dr Mandy Au Yeung<br>Dr Anne Chan<br>Dr Danny Chan<br>Dr Germaine Chan<br>Dr Nelson Cheung<br>Dr Kenny Fong<br>Dr YO Lam<br>Ms KY Lau<br>Ms Serene Or<br>Dr TL Poon<br>Dr KL Tsang<br>Dr Sheila Wong<br>Dr Jonas Yeung<br>Prof Ken Yung<br>Dr XL Zhu |

# Council of the Hong Kong Movement Disorder Society

| | |
|---|---|
| **PRESIDENT** | Dr Helen Yip |
| **VICE-PRESIDENT** | Dr Shirley Pang |
| **HON SECRETARY** | Dr Karen Ma |
| **HON TREASURER** | Dr Michael Lee |
| **COUNCIL MEMBERS** | Dr Mandy Au Yeung<br>Dr Danny Chan<br>Dr Anne Chan<br>Dr Nelson Cheung<br>Dr Kenny Fong<br>Ms KY Lau<br>Ms Serene Or<br>Dr TL Poon<br>Dr KL Tsang<br>Dr Sheila Wong<br>Dr Jonas Yeung<br>Prof Ken Yung<br>Dr XL Zhu |
| **Co-opt Member** | Dr YO Lam |
| **IMMEDIATE PAST PRESIDENT** | Dr Germaine Chan |
| **HON LEGAL ADVISOR** | Prof Stanley Fahn<br>Prof SL Ho<br>Prof Yoshikuno Mizuno<br>Prof Philip Thompson<br>Prof Mark Hallett |
| **HON AUDITOR** | Mr Vincent Ng |
| **Hon Legal Advisor** | Mr Stephen Mok |

# List of invited speakers

**Dr Angels Garcia Cazorla**
Paediatric Neurologist
The Sant Joan de Déu Barcelona Children's Hospital
Barcelona

**Dr Nelson Cheung**
Consultant Neurologist
Department of Medicine
Queen Elizabeth Hospital, Hong Kong SAR

**Prof Alfonso Fasano**
Chair, Neuromodulation
The University of Toronto and University Health Network
Professor
Department of Medicine (Division of Neurology)
University of Toronto

**Prof Susan Fox**
Head, Division of Neurology
University Health Network
Professor of Neurology
University of Toronto
Toronto, Ontario, Canada

**Prof Walter Maetzler**
Professor for Neurogeriatrics
Deputy director
Department of Neurology
The University Hospital in Kiel, Germany

**Prof Eng King Tan**
Deputy Chief Executive Officer (Academic Affairs)
Senior Consultant Neurologist
National Neuroscience Institute Professor
Duke-NUS Medical Schooland and NTU LKC School of Medicine
Singapore

# List of invited speakers

| Time | Session | Speaker | Chairperson |
|---|---|---|---|
| 9:45 - 10:00 | **Platform ready for log-in** | | |
| 10:00 - 10:45 | **Clinical Experiences with the Sensight directional lead system and the role of LFPs & Brainsense Technology**<br>*(Sponsored by Medtronic)* | Prof Alfonso Fasano (Canada) | Dr TL Poon<br>Dr Helen Yip |
| 10:45 - 11:00 | **Break Time** | | |
| 11:00 - 11:45 | **Management of Parkinson's Disease Pre & Post-Covid**<br>*(Sponsored by Lundbeck)* | Prof Susan Fox (Canada) | Dr TL Poon<br>Dr Germaine Chan |
| 11:45 - 12:00 | **Break Time** | | |
| 12:00 - 12:45 | **Cellular replacement therapy in PD: challenges and future direction** | Prof Eng King Tan (Singapore) | Dr Shirley Pang<br>Dr YO Lam |
| 12:45 - 13:00 | **Break Time** | | |
| 13:00 - 13:45 | **Quantitative analysis of movement and mobility related to PD and movement disorders** | Prof Walter Maetzler (Germany) | Dr Karen Ma<br>Dr Sheila Wong |
| 13:45 - 14:00 | **Break Time** | | |
| 14:00 - 14:45 | **Pediatric parkinsonism: rare genetic forms and diagnostic challenges** | Dr Angels Garcia Cazorla (Spain) | Dr Sheila Wong<br>Dr YO Lam |
| 14:45 - 15:00 | **Break Time** | | |
| 15:00 - 15:45 | **Movement Disorder Emergency** | Dr Nelson Cheung (HK) | Dr Mandy Au Yeung<br>Dr Helen Yip |
| 15:45 - 16:00 | **Break Time** | | |
| 16:00 - 17:00 | **Video Game**<br>(Prize will be offered to the top performers of the Video Game) | | Dr Germaine Chan<br>Dr Helen Yip |

# Abstract

## Clinical Experiences with the Sensight directional lead system and the role of LFPs & Brainsense Technology

Prof Alfonso Fasano (Canada)

The field of deep brain stimulation (DBS) is in constant evolution as it heavily relies on technology. One of the latest advances is the commercialization of DBS devices able to also record brain activity (Percept™ PC by Medtronic).

This presentation will give an overview on local field potentials (LFP) and cover the different features of sensing capabilities: 1. Brain survey, 2. Streamline, 3. Timeline, Event function. For each of these features practical examples useful in clinical practice will be provided.

In recent years most available leads have been segmented in order to allow directional stimulation. Percept is now able to be paired with segmented leads (Sensight™). These new leads are further refining the acquisition of LFPs and also tailoring the stimulation by allowing a fine tuning of the volume of tissue activated (VTA). This is possible thanks to two new features: Optistim and Stimlock. The presentation will also cover the basic principle of directional DBS and how to use these new features in clinical practice.

# Abstract

## Management of Parkinson's Disease Pre & Post-Covid

Prof Susan Fox (Canada)

The current coronavirus disease 2019 (COVID-19) pandemic has shown that individuals with Parkinson's disease (PD), are particularly vulnerable. The aim of this lecture is to provide recommendations in the management of PD during the pandemic and lessons learnt. Current evidence for therapeutic options for managing PD patients in early and when levodopa-induced fluctuations occur will be reviewed.

# Abstract

## Cellular replacement therapy in PD: challenges and future direction

Prof Eng King Tan (Singapore)

Cell replacement therapy is a viable therapeutic option in Parkinson's disease (PD) since its underlying primary pathology is a selective loss of dopaminergic neurons in the substantia nigra. Studies using fetal mesencephalic tissues in experimental models have shown excellent results. However, despite the promising efficacy of this approach observed in open label clinical studies, ethical concerns and troubling side effects identified in PD patients in sham controlled trials dampen widespread clinical application. The advancement of stem cell technology, especially recent progress in generating authentic midbrain dopamine neurons from human pluripotent stem cells has led to a resurgence of interest in autologous cell transplantation. The lecture will summarise the results of experimental and clinical transplantation studies in PD, and discuss the major issues influencing the efficacy of cell transplants and highlight the promises of ongoing trials.

# Abstract

## Quantitative analysis of movement and mobility related to PD and movement disorders

Prof Walter Maetzler (Germany)

In recent years, many digital devices have conquered the consumer and fitness market, and the medicine and pharma expected an enormous development boost from this advance also for this area. Hopes were and are particularly high in the area of movement disorders, as the digital devices seem to measure movement and mobility particularly well. In the course of the last few years, it has become apparent that the development of validated and reliable parameters that can be extracted from such digital devices is markedly more complex than initially assumed. Nevertheless, there is hope that clinically and scientifically relevant parameters will soon be available and revolutionise current medical assessment and treatment. Important terms in this context are regulatory body requirements, patient involvement, electronic health record, unsupervised passive assessment (of movement and mobility), harmonization of (big) data, privacy and data protection issues. This presentation will give an overview of the current situation of (unobtrusive, home-based) quantitative movement and mobility assessment in movement disorders, using Parkinson's disease (PD) as an example disease.

# Abstract

## Pediatric parkinsonism: rare genetic forms and diagnostic challenges

Dr Angels Garcia Cazorla (Spain)

Pediatric Parkinsonism (PP) or pediatric hypokinetic-rigid syndrome (HRS) is an uncommon and underdiagnosed movement disorder. Common symptoms include rigidity, tremor, postural instability, bradykinesia and hypokinesia. Its diagnosis appears difficult because pediatric clinical presentation is complex (associated with hypotonia, eye abnormalities, pyramidal signs or other symptoms) and rarely characterized by all the above-mentioned symptoms. In addition, PP mimics other more common neurological syndromes such as cerebral palsy and neuromuscular diseases. In Pediatrics, the term “Developmental Parkinsonism” has been related to monoamine defects in which the nigrostriatal pathway remains preserved without neurodegeneration. During the last decade, an important effort in order to characterize in detail biogenic amine deficiencies has been made, in particular through international networks such as the I-NTD (http://intd-online.org/).

This lecture will focus on the difficulties of the clinical diagnosis, will provide a global overview on the genetic causes and the pathophysiological mechanisms of rare forms of PP and will discuss biomarkers, L-Dopa response and other possible treatments.

Compared to monoamine disorders, the extremely rare genetic causes of PP that we will report have a more severe course with a significantly higher rate of rapid disease progression, severe intellectual disability, lower L-Dopa response and higher frequency of neuroimaging abnormalities. Moreover, clinical presentation will be associated to age-onset ranges. Rare genetic HRS is frequently part of the ‘Parkinsonism in the context of a multisystemic brain disease’. Additionally, the phenomenology of the movement disorder changes over time, in the context of a more complex motor dysfunction.

# Abstract

## Movement Disorder Emergency

Dr Nelson Cheung (HK)

Movement disorders are usually insidious in onset and slowly progressive. However, there are still some rapidly-evolving situations or acute complications of existing illnesses that require emergent interventions. Failure to reach accurate diagnosis and provide proper management may result in significant morbidity or even mortality.

In this talk, we will review some movement disorder emergencies, highlighting their clinical features, etiologies, differential diagnoses and management. These disorders are divided into hypokinetic disorders and hyperkinetic disorders based on phenomenology:

A. Hypokinetic Disorders
- Neuroleptic malignant syndrome
- Malignant catatonia
- Parkinsonism hyperpyrexia syndrome
- Acute parkinsonism
- Psychosis in Parkinson's disease
- Vocal cord abductor paresis

B. Hyperkinetic Disorders
- Acute dystonic reactions
- Dystonic storm
- Serotonin syndrome
- Myoclonus
- Hemiballisum-hemichorea
- Severe parkinsonian dyskinesia
- NMDA receptor encephalitis
- Functional movement disorders

Videos will be shown for illustrative purpose.

# Acknowledgement


## Symposium Sponsor:

Lundbeck

Medtronic

## Other Sponsor:

Allergan
an AbbVie company

GSK

IPSEN
Innovation for patient care

ucb Inspired by patients. Driven by science.

Once-Daily
# AZILECT®
rasagiline

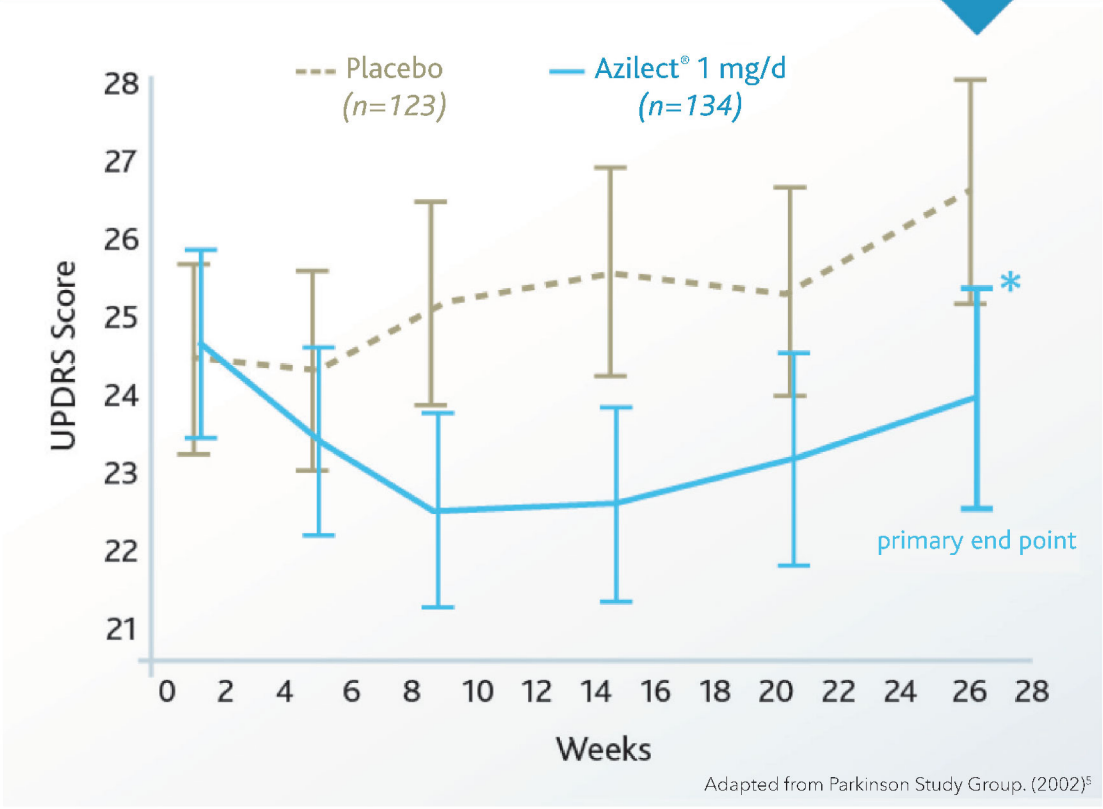
## Azilect First, Extend the Now

# Effective **Monotherapy** for Early Parkinson's Disease[1-4]

As long-term use of levodopa may lead to the resurgence of symptoms by a gradual decline of its efficacy, known as OFF time[1-4],

Once-Daily AZILECT® rasagiline **is viable option for treating early PD patients:**

## TEMPO[5] (US & Canada)




Adapted from Parkinson Study Group. (2002)[5]

Total unadjusted UPDRS score. Error bars = ± 1SE; *$p < 0.001$ vs placebo (Adjusted mean change in total UPDRS score).
UPDRS = Unified Parkinson's Disease Rating Scale. PD = Parkinson's Disease


**References:** 1. Fahn S et a . N Engl J Med 2004;351:2498 2506; 2. Bhidayasiri R, et al. Expert Rev Neurother. 20 5;15:1285 97, 3. DeMaggd G, Philip A. P . 20 5;40:747 73, 4. Chen W, et al. Transl Neurodegener. 2014;3:26; 5. PSG. Arch Neurol. 2002;59:1937 43.





**Lundbeck HK Limited**
Suite 4303, Central Plaza,
18 Harbour Road, Wanchai, Hong Kong
Tel: 2244 8888 www.lundbeck.com


Lundbeck

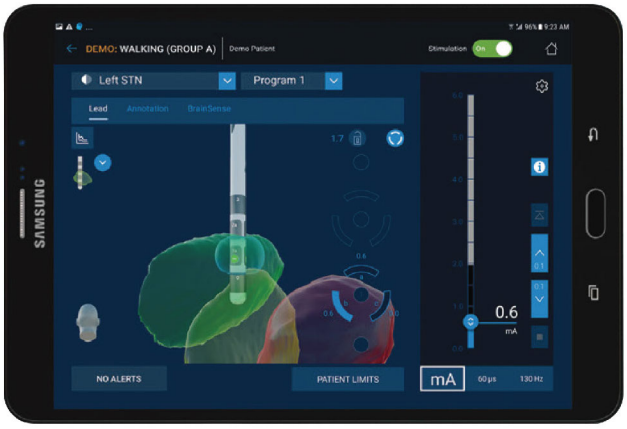

HKLL-2022.04-1802

Medtronic


# Percept™ PC Neurostimulator with BrainSense™ Technology

## Personalize therapy with confidence

The first complete DBS system with sensing, directionality, and visual programming gives you access to the data-driven insights you need to make informed decisions.



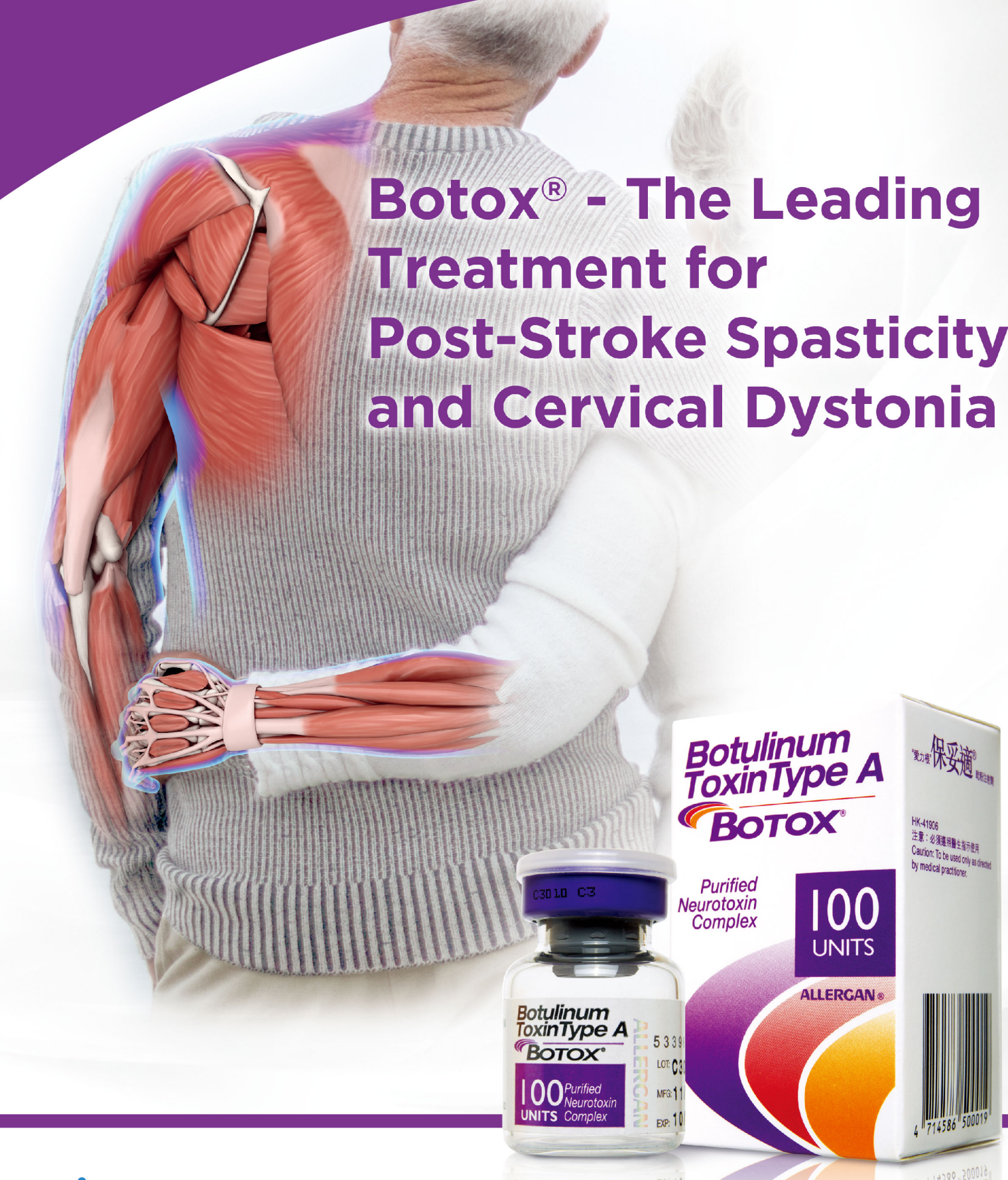

For healthcare professionals only.

## KEY FEATURES:

- Enhanced BrainSense™ technology
- Drives the SenSight™ directional lead
- 3T & 1.5T MR conditional capabilities
- Engineered for Patient Comfort with smart battery
- Advanced programming including OptiStim™ & ShapeLock™ Controls, multiple rates

BOTOX®
Botulinum Toxin Type A

# Botox® - The Leading Treatment for Post-Stroke Spasticity and Cervical Dystonia




Allergan
an AbbVie company

**Allergan Hong Kong Limited**
Suite 2405-08, 24/F, AIA Tower, 183 Electric Road, North Point, Hong Kong / Tel: +852 3467 8888 Fax: +852 2219 7397

HK-BTX-2050017

# Neupro®

rotigotine transdermal patch

- Once daily dose for full 24 hours[1]
- Improves early morning motor function[2]
- 2X More likely to wake up ON vs placebo[3]
- 3X Greater improvement in sleep quality vs placebo[2]
- 3X Reduced in depressive symptoms[2]
- 9X Reduced in Pain[2]


*Neupro® is indicated for the treatment of the signs and symptoms of early-stage idiopathic Parkinson's disease as monotherapy or in combination with levodopa, over the course of the disease through to late stages when the effect of levodopa wears off or becomes inconsistent and fluctuations of the therapeutic effect occur (end of dose or on-off fluctuations)

References: 1. Steiger M. Constant dopaminergic stimulation by transdermal delivery of dopaminergic drugs: a new treatment paradigm in Parkinson's disease. Eur J Neurol. 2008;15:6-15. 2. Trenkwalder C, Kies B, Rudzinska M, et al. Rotigotine effects on early morning motor function and sleep in Parkinson's disease: a double-blind, randomized, placebo-controlled study (RECOVER). Mov Disord. 2011;26(1):90-9. 3. Lewitt PA, Lyons KE, Pahwa R. Advanced Parkinson disease treated with rotigotine transdermal system PREFER study. Neurology. 2007;68:1262-1267.

**Abbreviated prescribing information: Presentation:** Neupro® is a thin, matrix-type square transdermal patch. Neupro® 2 mg/24 h transdermal patch releases 2 mg of rotigotine over 24 hours; 10 cm2 patch contains 4.5 mg of rotigotine. Neupro® 4 mg/24 h transdermal patch releases 4 mg of rotigotine over 24 hours; 20 cm2 contains 9 mg of rotigotine. Neupro® 6 mg/24 h transdermal patch releases 6 mg of rotigotine over 24 hours; 30 cm2 patch contains 13.5 mg of rotigotine. Neupro® 8 mg/24 h transdermal patch releases 8 mg over 24 hours; 40 cm2 patch contains 18 mg of rotigotine. **Therapeutic Indication:** To treat the signs and symptoms of idiopathic Parkinson's disease, either with or without concomitant levodopa therapy. **Dosage:** Neupro® is applied to the skin once a day. The patch remains on the skin for 24 hours and will then be replaced by a new one at a different application site. In the early stage of Parkinson's disease to use as monotherapy, treatment is initiated with a single daily dose of 2 mg/24 h. Dose will be increased by weekly increments of 2 mg/24 h, up to a maximum of 8 mg/24 h. In the advanced stage of Parkinson's disease and use in combination with levodopa, treatment initiation is at 4 mg/24 h. Dose will be increased by weekly increments of 2 mg/24 h, up to a maximum dose of 16 mg/24 h. **Method of administration:** The patch should be applied to clean, dry, intact healthy skin. Reapplication to the same site within 14 days should be avoided. Neupro® should not be placed on skin that is red, irritated or damaged. The patch should be pressed down firmly with the palm of the hand for about 20 to 30 seconds, so that it sticks well. In the event that a patch should fall off, a new patch should be applied for the remainder of the 24 hour dosing interval. You should change your patch at around the same time every day. The patch should not be cut into pieces. **Contraindications:** Hypersensitivity to rotigotine or to any of the excipients. Neupro® should be removed prior to any Magnetic Resonance Imaging or cardioversion to avoid burns. **Precautions:** Dopamine agonists are known to cause hypotension, and monitoring of blood pressure is recommended. Where somnolence or sudden sleep onset occurs, or where there is persistent, spreading or serious skin rash at the application site, consider dose reduction or termination of therapy. Rotate the site of patch application to minimize the risk of skin reactions. In case of generalized skin reactions associated with the use of Neupro®, discontinue treatment. Avoid exposure to direct sunlight until the skin is healed. If treatment is to be withdrawn, it should be gradually reduced to avoid symptoms of neuroleptic malignant syndrome. Impulse control disorders (including pathological gambling, increased libido, hypersexuality, compulsive spending or buying, binge eating & compulsive eating), and abnormal thinking and behaviour have been reported in patients treated with Neupro®. Caution is advised when treating patients with severe hepatic impairment. Eye examinations are recommended if vision abnormalities occur. **Interactions:** Neuroleptics (e.g. phenothiazines, butyrophenones, thioxanthenes) or metoclopramide, may diminish the effectiveness of Neupro®, and coadministration should be avoided. Caution should be advised when patients are taking sedating medicinal products or other central nervous system depressants (e.g. benzodiazepines, antipsychotics, antidepressants) or alcohol in combination with rotigotine. Neupro® may potentiate the dopaminergic adverse reaction of levodopa and may cause and/or exacerbate pre-existing dyskinesia, as described with other dopamine agonists. The incidence of some dopaminergic adverse events, such as hallucinations, dyskinesia, and peripheral oedema generally is higher when given in combination with levodopa. **Undesirable effects:** Very common side effects include nausea, vomiting, somnolence, dizziness, headache and application site reactions. Common side effects include perception disturbances, insomnia, sleep disorder, nightmare, abnormal dreams, impulse-control disorders, disturbances of consciousness, dyskinesia, dizziness postural, lethargy, vertigo, palpitations, orthostatic hypotension, hypertension, hiccups, constipation, dry mouth, dyspepsia, hyperhydrosis, erythema, pruritus, asthenic conditions, peripheral oedema, falling, weight decreased, CPK increased in Japanese patients. **Storage conditions:** Do not store above 30°C, store in the original package.

Inspired by **patients.**
Driven by **science.**

UCB PHARMA (HONG KONG) LTD.
香港太古城太古灣道14號太古城中心第3期21樓
21st Floor, Cityplaza Three, 14 Taikoo Wan Road, Taikoo, Hong Kong
Tel: (852) 2854 9333 Fax: (852) 2854 9111 www.ucb.com

HK/NE/1807/0005

www.hkmds.org.hk