The Movement Disorder Society

FINAL PROGRAM

8th International Congress of Parkinson's Disease and Movement Disorders

June 13-17, 2004

Palazzo dei Congressi
ROME, ITALY
# TABLE OF CONTENTS

- Invitation ................................................................. 2
- Acknowledgements .................................................. 4
- Organization ............................................................. 5
- MDS Committees and Task Forces ................................. 8
- International Congress Registration and Venue .............. 11
- International Congress Information ............................... 12
  - Continuing Medical Education ................................. 12
  - Evaluations .......................................................... 12
  - Press Room ......................................................... 13
  - Social Events ....................................................... 14
- Program at a Glance .................................................. 17
- Scientific Sessions .................................................... 18
- Faculty ................................................................. 38
- Committee and Task Force Meetings .............................. 41
- Exhibitor Information and Directory .............................. 42
- Floor Plan and Meeting Space ..................................... 46
- Map of Rome .......................................................... 51
- Poster Session 1 ....................................................... 52
- Poster Session 2 ....................................................... 63
- Poster Session 3 ....................................................... 73
- Poster Session 4 ....................................................... 83

---

**THE CONGRESS IS UNDER THE AUSPICES OF:**

- The President of the Italian Republic
- The Prime Minister of the Italian government
- The National Institute of Health (ISS)
- The National Research Council (CNR)
- The City of Rome
- The School of Medicine and Surgery, University of Rome “La Sapienza”
- The Italian Society of Neurology
Dear Colleagues,

On behalf of the Officers and International Executive Committee of The Movement Disorder Society, welcome to the 8th International Congress of Parkinson’s Disease and Movement Disorders.

I would like to thank the faculty and the members of the Congress Scientific Program Committee for this exemplary scientific program and for their contribution to the International Congress.

The International Congress week begins with a variety of Kickoff Seminars, which are supported through unrestricted educational grants from industry. The week continues with a wide array of plenary sessions, parallel sessions, seminars and video dinners. Poster sessions are unopposed and, to further serve our participants, time has also been allotted for 16 poster platform presentations.

I would like to thank the International Congress Oversight Committee and the Congress Organizing Committee for all of their hard work over the past two years. Their dedication in planning has allowed us to offer International Congress attendees the best that Rome has to offer. The social program will include a Sunday Opening Ceremony which will be held on the roof top terrace of the Palazzo dei Congressi. This event offers attendees the opportunity to greet each other while taking in the exquisite tastes and talents of Italy. The Congress Gala Event takes place at the Palazzo Brancaccio, offering a mix of Roman Patrician architecture, as well as enchanting gardens.

In closing, I would like to thank all of the International Congress attendees for their participation in the success of the 8th International Congress.

Sincerely,

C. Warren Olanow
President
Dear Colleagues,

It is my pleasure to welcome you to the 8th International Congress of Parkinson’s Disease and Movement Disorders. As one of the world’s most beautiful cities, Rome is an ideal venue for the International Congress and I hope that you will enjoy all that the city has to offer.

The photograph on the front page shows the Statue of the Nile, part of the Fountain of the Rivers created in 1651 by Gian Lorenzo Bernini and commissioned by Pope Innocenzo X. The Fountain is located in the middle of Piazza Navona and is one of the finest symbols of Baroque art. Its importance lies in the way the sculptor has fused figures, statues, landscapes, and water into one of his most imposing creations. The mass of rocks and grottoes forming the fountain is surmounted by a tall obelisk. At the four corners are colossal figures of the rivers Danube, Ganges, Nile and Plate, representing the four quarters of the globe.

With this symbolism in mind, I welcome participants from all over the world. The aim of the International Congress is to increase our knowledge in the field of Movement Disorders by sharing global research and perspectives. In line with MDS tradition, the scientific program is informative, comprehensive and innovative, including plenary session lectures, parallel sessions, platform presentations, abstract poster presentations, seminars and video dinners.

On behalf of the Congress Organizing Committee and The Movement Disorder Society, welcome to Rome.

Alfredo Berardelli
Chair, Congress Organizing Committee
The Movement Disorder Society wishes to acknowledge and thank the following companies for their support:

**DOUBLE PLATINUM LEVEL**

- Pfizer

**PLATINUM PLUS LEVEL**

- Novartis
- Orion Pharma

**PLATINUM LEVEL**

- GlaxoSmithKline
- Lundbeck
- Teva Pharmaceutical Industries Ltd.
- Teva Neuroscience
- Eisai

**GOLD LEVEL**

- Allergan
- Amersham Health
- BerTek NeuroCare
- Boehringer Ingelheim
- Medtronic
- Ortho-McNeil
- Schwarz Pharma

**BRONZE LEVEL**

- Cephalon
- Euthérapie
- Kyowa
ORGANIZATION

The Movement Disorder Society (MDS) is an international, professional society of clinicians, scientists, and other healthcare professionals, who are interested in Parkinson’s disease, related neurodegenerative and neurodevelopmental disorders, hyperkinetic Movement Disorders, and abnormalities in muscle tone and motor control. The spectrum of clinical disorders represented by the Society includes but is not limited to:

- Ataxia
- Blepharospasm
- Dysphonia
- Dystonic disorders
- Gait disorders
- Huntington’s disease
- Myoclonus
- Parkinson’s disease
- Spasticity
- Tardive dyskinesia
- Tics and Tourette syndrome
- Tremor

The Movement Disorder Society (MDS) was founded in 1985 on the initiative of Professors Stanley Fahn and C. David Marsden, whose leadership and vision guided the expansion of clinical expertise and research in this field. The organization merged in 1988 with the International Medical Society for Motor Disturbances.

PURPOSE, MISSION AND GOALS

Purpose:
The object and mission of the Society shall be to advance the neurological sciences pertaining to Movement Disorders; to operate exclusively for scientific, scholarly and educational purposes; to encourage research; to provide forums, such as medical journals, scientific symposia and International Congresses, for sharing ideas and for advancing the related clinical and scientific disciplines; to encourage interest and participation in the activities of the Society among healthcare and allied professionals and scientists; and to collaborate with other related professional and lay organizations.

Mission and Goals:
To disseminate knowledge about Movement Disorders by:
- Providing educational programs for clinicians, scientists and the general public designed to advance scientific and clinical knowledge about Movement Disorders
- Sponsoring congresses and symposia on Movement Disorders
- Collaborating with other international organizations and lay groups
- Publishing journals, videotapes and other collateral materials committed to high scientific standards and peer review

To promote research into causes, prevention and treatment of Movement Disorders by:
- Using the Society’s influence and resources to enhance support for research
- Facilitating the dissemination of information about research
- Encouraging the training of basic and clinical scientists in Movement Disorders and related disorders

To formulate and promote public policy that will favorably affect the care of patients with Movement Disorders by:
- Working with regulatory agencies to assist them in the approval process of safe and effective therapeutic interventions
- Informing the public (media) and patient support groups of new research and therapeutic advances
- Playing a proactive role in the development of policies that affect support of research and patient care
- Developing standards of training in the specialty
MDS OFFICERS

President
C. Warren Olanow, USA

President-Elect
Andrew J. Lees, United Kingdom

Secretary
Andres M. Lozano, Canada

Secretary-Elect
Philip D. Thompson, Australia

Treasurer
Wolfgang H. Oertel, Germany

Treasurer-Elect
Daniel Tarsy, USA

Past President
Werner Poewe, Austria

International Executive Committee
Paul J. Bédard, Canada
Francisco Cardoso, Brazil
Cynthia L. Comella, USA
Santiago Giménez-Roldán, Spain
Nir Giladi, Israel
Ann M. Graybiel, USA
Yoshikuni Mizuno, Japan
Kapil D. Sethi, USA
Caroline M. Tanner, USA
Marie Vidailhet, France

International Congress Oversight Committee
Chair: Mark Hallett, USA
Wolfgang H. Oertel, Germany
C. Warren Olanow, USA
Werner Poewe, Austria
Eduardo Tolosa, Spain

Congress Scientific Program Committee
Chair: C. Warren Olanow, USA
Co-Chair 2004: Anthony H.V. Schapira, United Kingdom
Co-Chair 2005: Anthony E. Lang, Canada
Alim L. Benabid, France
Alfredo Berardelli, Italy
Cynthia L. Comella, USA
Bruno Dubois, France
John A. Hardy, USA
Etienne C. Hirsch, France
Joseph Jankovic, USA
Yoshikuni Mizuno, Japan
José A. Obeso, Spain
Olivier Rascol, France
Peter Riederer, Germany
John C. Rothwell, United Kingdom

Congress Organizing Committee
Chair: Alfredo Berardelli, Italy
Giovanni Abbruzzese, Italy
Alberto Albanese, Italy
Paolo Barone, Italy
Ubaldo Bonuccelli, Italy
Carlo Colosimo, Italy
Giovanni Fabbrini, Italy
Mario Manfredi, Italy
Stefano Ruggieri Italy
Fabrizio Stocchi, Italy
Mario Zappia, Italy

Past Presidents
2001-2002 Werner Poewe, Austria
1999-2000 Mark Hallett, USA
1997-1998 Eduardo Tolosa, Spain
1995-1996 Joseph Jankovic, USA
1991-1994 C. David Marsden, United Kingdom
1988-1991 Stanley Fahn, USA

International Medical Society for Motor Disturbances
Past Presidents
1993-1994 C. Warren Olanow, USA
1991-1992 Bastian Conrad, Germany
1989-1990 Mark Hallett, USA
1987-1988 Mario Manfredi, Italy
1985-1986 C. David Marsden, United Kingdom

MDS International Secretariat
The Movement Disorder Society
555 East Wells Street, 11th Floor
Milwaukee, WI 53202-3823
USA
Tel: +1 414-276-2145
Fax: +1 414-276-3349
E-mail: congress@movementdisorders.org
Web site: www.movementdisorders.org

ARISTEA - Local Organizing Secretariat
Via Tolmino, 5 · 00198 Rome, Italy
Tel: +39 06 845431
Fax: +39 06 84543700
E-mail: aristea.roma@aristea.com
Archives Committee
Chair: Werner Poewe
Staff Liaison: Jenny Oliva

Awards Committee
Chair: Oscar S. Gershanik
Paolo Barone
Kailash P. Bhatia
Günther Deuschl
Etienne C. Hirsch
Staff Liaison: Jenny Oliva

Bylaws Committee
Chair: Demetrius M. Maraganore
Kailash P. Bhatia
Alexis Elbaz
Elan D. Louis
David Riley
Anette Schrag
Staff Liaison: Caley Kleczka

CME Committee
Chair: Ronald F. Pfeiffer
Irene Litvan
Ryan J. Uitti
Robert L. Rodnitzky
Dee E. Silver
Michele Tagliati
David Riley
Staff Liaisons: Jenny Oliva, Jody McCarthy

Education Committee
Chair: Cynthia L. Comella
Co-Chair: Fabrizio Stocchi
Stewart A. Factor
Joaquim Ferreira
Robert Iansek
Kelly Lyons
Yoshikuni Mizuno
Kapil D. Sethi
Staff Liaison: Jody McCarthy

Financial Affairs Committee
Chair: Wolfgang H. Oertel
Werner Poewe
Daniel Tarsy
Staff Liaison: Caley Kleczka

Industrial Relations Committee
Chair: Olivier Rascol
Anthony E. Lang
Yoshikuni Mizuno
Werner Poewe
Eduardo Tolosa
Ray L. Watts
Staff Liaison: Caley Kleczka

Journal Oversight Committee
Chair: Joseph Jankovic
Francisco Cardoso
Mark Hallett
Rivka Inzelberg
Staff Liaison: Caley Kleczka

Liaison/Public Relations Committee
Chair: Matthew B. Stern
Susan Bressman
Jonathan Carr
Beom S. Jeon
Regina Katzenschlager
Eldad Melamed
Ivan Rektor
Bhim S. Singhal
Staff Liaisons: Lisa Seidl, Terri Walosz

Membership Committee
Chair: Gregor K. Wenning
Francisco Cardoso
Carlo Colosimo
Andrew J. Hughes
Irene Litvan
Elan D. Louis
Yasushi Osaki
Young H. Sohn
Staff Liaison: Lisa Seidl

Scientific Issues Committee
Chair: Anthony H.V. Schapira
Thomas Gasser
Etienne C. Hirsch
Joseph Jankovic
Karl D. Kieburtz
José A. Obeso
Fabrizio Stocchi
Staff Liaison: Jody McCarthy

Strategy and Planning Committee
Chair: Mark Hallett
Andrew J. Lees
C. Warren Olanow
Werner Poewe
Staff Liaison: Caley Kleczka

Task Force for the Development of Rating Scales for Parkinson’s Disease
Chair: Christopher Goetz
Werner Poewe
Olivier Rascol
Cristina Sampaio
Glenn Stebbins
Staff Liaisons: Caley Kleczka, Lisa Seidl

Task Force on Epidemiology
Chair: Caroline Tanner
Yoav Ben-Shlomo
Nadir Bharucha
James Bower
Piu Chan
Dusan Flisar
Amos Korczyn
Mathilde Leonardi
Elan D. Louis
Zvezdan Pirtosek
Gustavo Roman
Web Ross
Staff Liaison: Jenny Oliva
MDS COMMITTEES AND TASK FORCES

Task Force on Evidence-Based Medicine in Movement Disorders
Chair: Cristina Sampaio
Christopher Goetz
William Koller
Werner Poewe
Olivier Rascol
Staff Liaison: Jody McCarthy

Task Force on PD Dementia
Co-Chair: Bruno Dubois
Co-Chair: Murat Emre
Co-Chair: Ian McKeith
Dag Aarsland
G. A. (Tony) Broe
Richard Brown
David John Burn
Jeffrey L. Cummings
Dennis Dickson
Charles Duyckaerts
Serge G. Gauthier
Christopher G. Goetz
Amos D. Korczyn
Andrew J. Lees
Richard Levy
Irene Litvan
Yoshikuni Mizuno
C. Warren Olanow
Werner Poewe
Niall P. Quinn
Cristina Sampaio
Eduardo Tolosa
Staff Liaison: Caley Kleczka

UPDRS Revision Task Force
Chair: Christopher Goetz

UPDRS Part I
Chair: Werner Poewe
Subcommittee Members: Bruno Dubois, Anette Schrag

UPDRS Part II
Chair: Matthew Stern
Subcommittee Members: Anthony Lang, Peter LeWitt

UPDRS Part III
Chair: Stanley Fahn
Subcommittee Members: Joseph Jankovic, C. Warren Olanow

UPDRS Part IV
Chair: Pablo Martinez-Martin
Subcommittee Members: Andrew Lees, Olivier Rascol, Bob Van Hilten

Scale Development Standards
Chair: Glenn Stebbins
Subcommittee Members: Robert Holloway, David Nyenhuis

Appendices
Chair: Cristina Sampaio
Subcommittee Members: Richard Dodel, Jaime Kulasevsky

Statistical Testing
Chair: Barbara C. Tilley
Subcommittee Members: Sue Leurgans, Jean Teresi

Staff Liaisons: Caley Kleczka, Lisa Seidl
...Coming Together to Bring New Solutions to Your Patients
BADGES
All International Congress attendees will receive a name badge with their registration materials. Badges should be worn at all times as they will be used to control access into all International Congress sessions and activities. Individuals will be identified as follows:
- Red = Delegate
- Yellow = Exhibitor
- Orange = Exhibitor Delegate
- Green = Guest
- Purple = Press
- Blue = Staff

LANGUAGE
The official language of the International Congress is English.

REGISTRATION DESK
Location: Ground Floor
Name badges, seminar and special event tickets and International Congress bags can be collected at the International Congress Registration Desk located in the entrance lobby of the Palazzo dei Congressi during the following hours:

<table>
<thead>
<tr>
<th>Day</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saturday, June 12</td>
<td>3:00 pm to 8:30 pm</td>
</tr>
<tr>
<td>Sunday, June 13</td>
<td>7:00 am to 7:30 pm</td>
</tr>
<tr>
<td>Monday, June 14</td>
<td>7:00 am to 7:30 pm</td>
</tr>
<tr>
<td>Tuesday, June 15</td>
<td>7:00 am to 7:30 pm</td>
</tr>
<tr>
<td>Wednesday, June 16</td>
<td>7:00 am to 7:30 pm</td>
</tr>
<tr>
<td>Thursday, June 17</td>
<td>7:00 am to 5:00 pm</td>
</tr>
</tbody>
</table>

SPECIAL ACCESSIBILITY NEEDS
Delegates requiring special arrangements in order to fully participate in the International Congress should speak to an MDS staff member at the Registration Desk located on the Ground Floor of the Palazzo dei Congressi.

VENUE
Palazzo dei Congressi
Piazzale J. F. Kennedy
00144 Rome, Italy
The average temperature in Rome in June ranges from a low of 61°F/16°C to a high of 77°F/25°C.

The Palazzo dei Congressi and the EUR
The Congress will take place in the fascinating setting of the Palazzo dei Congressi, located in the EUR district. This modern quarter is considered one of the most noteworthy areas of contemporary Italian urban and architectural culture. The monumental EUR (Esposizione Universale Roma) complex, was conceived in the late 1930s to host the Universal Exhibition which was to be held in 1942, but never took place. The monumental buildings in the urban district of EUR are spuriously set out in an architectural setting with wide tree-lined avenues, parks and a lake.

The Palazzo dei Congressi is one of the outstanding works of Italian architecture from the period between the two wars. It admirably synthesizes the ambitious project in line with the most modern architectural ideas of the time. The building was designed by Adalberto Libera in 1937 and was built in two phases: the first between 1939 and 1943, when building of the EUR district began, and the second between 1952 and 1954, when EUR became a modern residential quarter and one of Rome’s most directional areas. The main features of architectural interest are the immense cubic hall, the Salone della Cultura, covered by an imposing vault in reinforced concrete, and the portico supported by granite columns. The Sala dei Congressi, situated behind the main body of the building, is decorated with frescos painted by Gino Severini, a famous Italian futurist artist who lived at the beginning of the 20th century. The cover suspended over the back of the atrium functions as a hanging garden and outdoor theatre thus creating fascinating space that draws inspiration from metaphysical aesthetics.

SOCIAL EVENTS

Sunday, June 13
Opening Ceremony
Location: Salone Della Cultura, Ground Floor
8:00 pm to 9:30 pm

Welcome Reception
Location: Rooftop Terrace
9:30 pm to 11:00 pm
All International Congress attendees and registered guests are invited to meet friends and colleagues during the traditional Opening Ceremony and Welcome Reception. Following the Opening Ceremony, a moonlight Welcome Reception will be held on the Rooftop Terrace.

Monday, June 14
International Congress Banquet at the Brancaccio Palace
8:00 pm to 11:00 pm
Palazzo Brancaccio is the newest Roman patrician palace. Built by Princess Elizabeth and Salvatore Brancaccio in 1880, this palace is still considered one of the most beautiful places in Rome.

The evening’s itinerary begins with cocktails and hors d’oeuvres; dinner will be served, and local entertainment will highlight the evening.

Transportation to the Brancaccio Palace is provided from the Palazzo dei Congressi and Sheraton Roma beginning at 7:30 pm. Shuttles will depart the Brancaccio Palace at the end of the event. A metro station, close to the Brancaccio Palace, is also available for those staying in the city center.

Tickets purchased in advance are enclosed in each delegate’s registration materials. Additional tickets may be purchased, based on availability at the Registration Desk in the Palazzo dei Congressi.

Fee: $100 USD per person
ABSTRACTS-ON-DISK™
All abstracts published in the supplement to the MDS Journal will also be available by Abstracts-On Disk™ sponsored by MDS and supported through an unrestricted educational grant from Medtronic Neurological. To obtain a copy, please visit the Medtronic Booth #129 and exchange the voucher located in your registration bag.

Abstract Volume
All abstracts accepted for poster presentation have been published in an abstract supplement to the MDS Journal, Movement Disorders. Each delegate will receive one copy with their registration materials. MDS members have already received an additional copy with their May journal issue.

CONTINUING MEDICAL EDUCATION
Objectives
As a result of participating in this activity, the attendee should be better able to:
· Describe the pathophysiology and neurobiology of Parkinson's disease and other Movement Disorders
· Discuss the diagnostic approaches and tools available for Parkinson's disease and other Movement Disorders
· Discuss the pharmacological and non-pharmacological treatment options available for Parkinson's disease and other Movement Disorders

Target Audience
The target audience of the 8th International Congress of Parkinson’s Disease and Movement Disorders includes clinicians, researchers, post-doctoral fellows and medical school students with an interest in the current research and approaches for the treatment of Movement Disorders.

Availability of CME Credit
The scientific program of the 8th International Congress of Movement Disorders and Parkinson’s Disease has been reviewed and approved for Category 1 credit toward the American Medical Association (AMA) Physician’s Recognition Award. The Movement Disorder Society has approved this educational activity for a maximum of 39 Category 1 credits. Each physician should claim only those credits that he/she actually spent in the educational activity. One credit may be claimed for each hour of participation.

Reciprocity between the European and AMA PRA Credit Systems
A pilot CME credit reciprocity system between the European Union of Medical Specialists (UEMS) and the American Medical Association (AMA) has been extended until 2006. Under the terms of this joint agreement, the UEMS and AMA agree to the exchange and reciprocal recognition of AMA PRA Category 1 and EACCME (European Accreditation Council for Continuing Medical Education) credits earned through participation in approved live educational activities.

Requesting CME Credit Certificates
In order to receive a CME Certificate authenticating participation in this educational activity, International Congress participants must complete and submit a CME Request Form following the last session attended EACH DAY of the Congress. Completed CME Request Forms should be handed to meeting room attendants along with completed evaluation forms. Alternatively, completed CME Request Forms can be returned to the CME Desk situated near the Registration Desk on the ground floor of the Congress.

Participants can find CME Request Forms for each day of the International Congress in their International Congress registration bags. International Congress registration bags are collected upon registering at the Registration Desk on the ground floor. Additional CME Request Forms can be obtained from all meeting room attendants or from the CME Desk near the Registration Desk.

Faculty Financial Disclosure Information
It is the policy of The Movement Disorder Society (MDS) to ensure balance, independence, objectivity, and scientific rigor in all sponsored educational activities. All faculty participating in any MDS sponsored activities are required to disclose to the activity audience any real or apparent conflict(s) or interest that may have a direct bearing on the subject matter of the continuing medical education (CME) activity. This pertains to relationships with pharmaceutical companies, biomedical device manufacturers, or other corporations whose products or services are related to the subject matter of the presentation topic. The intent of this policy is not to prevent a speaker with a potential conflict of interest from making a presentation. It is merely intended that any potential conflict should be identified openly so that the listeners may form their own judgments about the presentation with the full disclosure of the facts. It remains for the audience to determine whether the speaker’s outside interest may reflect a possible bias in either the exposition or the conclusions presented.

Please see the yellow insert in your International Congress registration bag for complete information regarding faculty disclosure of commercial relationships.

Faculty Disclosure of Unlabeled Product Use Discussion
Presentations which provide information in whole or in part related to non-approved uses for drug products and/or devices must clearly acknowledge the unlabeled indications or the investigative nature of their proposed uses to the audience. Speakers who plan to discuss non-approved uses for commercial products and/or devices must advise the International Congress audience of their intent.

Please see the yellow insert in your International Congress registration bag for complete information regarding faculty disclosure of unlabeled product use discussion.

Continuing Medical Education for Italian Physicians
For information regarding Continuing Medical Education for Italian Physicians, please contact Maddalena Redini at the Technical Secretariat for CME Accreditation, the Italian Society of Neurology, at telephone +39 50 879740 or by e-mail at neuro@sirius.pisa.it.

Evaluations
Please take time to complete the evaluation forms provided for each session you attend. Your input and comments are essential in planning future educational programs for MDS. When completed, evaluations may be returned to your meeting room attendants or to the MDS Registration Desk.
INTERNATIONAL CONGRESS INFORMATION

EXHIBITION
Location: Ground Floor
Please allow adequate time in your daily schedule to visit the exhibits located throughout the Ground Level of the Palazzo dei Congressi. The exhibition is an integral component of your International Congress experience, offering you the opportunity to speak with representatives of companies that provide services and products directly related to Movement Disorders. Representatives will be available to discuss these services and products during the following hours:

- Monday, June 14 8:00 am to 5:00 pm
- Tuesday, June 15 8:00 am to 5:00 pm
- Wednesday, June 16 8:00 am to 5:00 pm
- Thursday, June 17 8:00 am to 5:00 pm

INTERNET CAFÉ
Location: First Floor
Internet access will be available to meeting attendees on the First Floor of the Palazzo dei Congressi. The Internet Café is supported through an unrestricted educational grant from Cephalon, Inc. Please limit your internet use to 15 minutes so that other attendees can also access this service.

LUNCH OPTIONS
Rooftop Terrace Restaurant
Location: Rooftop Terrace
Served lunch will be available at the Rooftop Terrace Restaurant. Tickets are required for lunch and may be purchased at the Registration Desk.

Quick Lunch
Location: Ground Floor
Lunch bags containing sandwiches, fruit and snacks may be purchased. Tickets are required for lunch and may be purchased at the Registration Desk.

MDS EXHIBIT AND INFORMATION STAND
Location: Registration Area, Ground Floor
The Movement Disorder Society (MDS) is an international society of healthcare professionals committed to research and patient care in the fields of Parkinson’s disease and other disorders of movement and motor control.

MDS supports and promotes a wide range of educational programming and other initiatives to advance scientific understanding and standards of care as they pertain to Movement Disorders. For this, MDS provides forums such as a high ranking journal, scientific symposia and international congresses.

Attendees are invited to take advantage of MDS member benefits by applying to the Society. Learn more about MDS initiatives and speak with a representative at the MDS Exhibit and Information Stand located in the Registration Area during the following hours:

- Saturday, June 12 3:00 pm to 8:30 pm
- Sunday, June 13 8:00 am to 5:30 pm
- Monday, June 14 8:00 am to 5:30 pm
- Tuesday, June 15 8:00 am to 5:30 pm
- Wednesday, June 16 8:00 am to 5:30 pm
- Thursday, June 17 8:00 am to 5:00 pm

NO CAMERAS
Cameras are not permitted in any 8th International Congress educational session or in the poster areas.

OPTIONAL TOURS
Tours have been arranged by:
ARISTEA
Via Tolmino, 5
00198 Roma - Italy
Tel. +39 06 845431
Fax +39 06 84543700

Please visit the Tours Desk in the Registration Area on the Ground Floor to collect your tour tickets. Additional tour tickets may be purchased at this desk, based on availability.

PRESS ROOM
Location: Press Room, Ground Floor
Members of the working media may register without charge for the 8th International Congress in the Press Room. Press must register, provide credentials and wear their badge for admittance into MDS sessions.

Press Room hours are as follows:

- Sunday, June 13 8:00 am to 5:00 pm
- Monday, June 14 8:00 am to 5:00 pm
- Tuesday, June 15 8:00 am to 5:00 pm
- Wednesday, June 16 8:00 am to 5:00 pm
- Thursday, June 17 8:00 am to 5:00 pm

SCIENTIFIC PROGRAM
Kickoff Seminars
Kickoff Seminars emphasize pharmacological treatment approaches for Movement Disorders, as well as diagnostic strategy overviews and updates. These industry supported seminars are open to all International Congress registrants.

Plenary and Parallel Sessions
Plenary and Parallel Sessions continue to offer a variety of popular topics in lecture format and panel discussion from renowned neurologists and Movement Disorder specialists from around the world. Each presenter offers his/her perspective and information on the latest studies and research on Parkinson’s disease and other Movement Disorders. These main sessions are open to all International Congress registrants.

Seminars
Sessions offering Italian cuisine are featured throughout the International Congress week, similar to the popular Wine and Cheese Seminars from the 7th International Congress in Miami in 2002. Each session offers an expert’s view on Movement Disorders through a variety of topics. Seminars have limited registration to encourage discussion and interaction with presenters.

Fee: $55 USD/ $40 USD for junior participants and allied health professionals.
Video Dinners
Due to outstanding reviews from the Miami International Congress, Video Dinners are again offered. Video presentations of atypical Movement Disorders engage delegates and generate clinical discussions. To ensure greater interaction, video sessions participation is limited. Dinner is served during the sessions.
Fee: $80 USD/ $55 USD for junior participants and allied health professionals.

Platform Presentations
16 abstracts have been selected for oral platform presentation at the International Congress. The abstracts selected feature newsworthy and cutting-edge information about Parkinson’s disease and Movement Disorders. The Platform Presentations are held as main sessions, and are open to all International Congress delegates.

Abstract Poster Sessions
Delegate feedback from past International Congresses has indicated a great interest in Poster Sessions. Poster Sessions are featured each day utilizing the following schedule:

Poster Session 1
Location: First Floor
Monday, June 14
Poster Viewing: 8:30 am to 5:00 pm
Authors Present Odd Numbers: 12:00 pm to 1:00 pm
Authors Present Even Numbers: 4:00 pm to 5:00 pm
Abstracts 1-344

Poster Session 2
Location: First Floor
Tuesday, June 15
Poster Viewing: 8:30 am to 5:00 pm
Authors Present Odd Numbers: 11:30 am to 12:30 pm
Authors Present Even Numbers: 4:00 pm to 5:00 pm
Abstracts 345-694

Poster Session 3
Location: First Floor
Wednesday, June 16
Poster Viewing: 8:30 am to 5:00 pm
Authors Present Odd Numbers: 11:30 am to 12:30 pm
Authors Present Even Numbers: 4:00 pm to 5:00 pm
Abstracts 695-1017

Poster Session 4
Location: First Floor
Thursday, June 17
Poster Viewing: 8:30 am to 4:30 pm
Authors Present Odd Numbers: 12:00 pm to 1:00 pm
Authors Present Even Numbers: 1:00 pm to 2:00 pm
Abstracts 1018-1338

SOCIAL EVENTS

Sunday, June 13
Opening Ceremony
Location: Salone Della Cultura, Ground Floor
8:30 pm to 9:30 pm

Welcome Reception
Location: Rooftop Terrace
9:30 pm to 11:00 pm
All International Congress attendees and registered guests are invited to meet friends and colleagues during the traditional Opening Ceremony and Welcome Reception. Following the Opening Ceremony, a moonlight Welcome Reception will be held on the Rooftop Terrace.

Monday, June 14
International Congress Banquet at the Brancaccio Palace
8:00 pm to 11:00 pm
Palazzo Brancaccio is the newest Roman patrician palace. Built by Princess Elizabeth and Salvatore Brancaccio in 1880, this palace is still considered one of the most beautiful places in Rome.
The evening’s itinerary begins with cocktails and hors d’oeuvres; dinner will be served, and local entertainment will highlight the evening.
Transportation to the Brancaccio Palace is provided from the Palazzo dei Congressi and Sheraton Roma beginning at 7:30 pm. Shuttles will depart the Brancaccio Palace at the end of the event. A metro station, close to the Brancaccio Palace, is also available for those staying in the city center.
Tickets purchased in advance are enclosed in each delegate’s registration materials. Additional tickets may be purchased, based on availability at the Registration Desk in the Palazzo dei Congressi.
Fee: $100 USD per person

SPEAKER READY ROOM
Location: Slide Review Room, Ground Floor
All speakers must check in at the Speaker Ready Room with presentation materials on the day prior to their scheduled presentation. Equipment is available for faculty to review their presentations. Audio visual personnel will be available for assistance.
The Speaker Ready Room hours are as follows:
Saturday, June 12 5:00 pm to 8:00 pm
Sunday, June 13 7:00 am to 8:00 pm
Monday, June 14 7:00 am to 6:00 pm
Tuesday, June 15 7:00 am to 8:00 pm
Wednesday, June 16 7:00 am to 8:00 pm
Thursday, June 17 7:00 am to 4:30 pm

TRANSPORTATION
Shuttle service is offered between the Sheraton Roma Hotel and the Palazzo dei Congressi. Delegates commuting from the city center receive metro passes in their on-site registration materials.
To reach the Palazzo dei Congressi from the City Center by subway take the B Line to Fermi Station. Please refer to the metro map on page 51. A shuttle from Fermi Station to the Palazzo dei Congressi is available.
ACTIVA® THERAPY INCREASES PARKINSON’S PATIENT “ON” TIME BY AN AVERAGE OF 6 HOURS.*

When drugs no longer provide adequate relief, there’s Activa Therapy.

- Effective for 87% of qualifying Parkinson’s disease patients.**
- Effective for bradykinesia/akinesia, tremor, and/or rigidity.*
- More than 25,000 people implanted worldwide.

Visit Medtronic at booth 129 to learn more.

* Results were for a subset of patients whose data were verified against medical records.

** PD symptom improvement with medication off. Results were for a subset of patients whose data were verified against medical records. Data on file at Medtronic, Inc.
Activa® Parkinson's Control Therapy and Tremor Control Therapy:
Product technical manual must be reviewed prior to use for detailed disclosure.

Indications:
Parkinson's Control Therapy: Bilateral stimulation of the internal globus pallidus (Gpi) or the subthalamic nucleus (STN) using Medtronic Activa® Parkinson's Control Therapy is indicated for adjunctive therapy in reducing some of the symptoms of advanced, levodopa-responsive Parkinson's disease that are not adequately controlled with medication.

Tremor Control Therapy: Unilateral thalamic stimulation by the Medtronic Activa® Tremor Control System is indicated for the suppression of tremor in the upper extremity. The system is intended for use in patients who are diagnosed with Essential Tremor or Parkinsonian tremor not adequately controlled by medications and where the tremor constitutes a significant functional disability. The safety or effectiveness of this therapy has not been established for bilateral stimulation.

Contraindications:
Contraindications include patients who will be exposed to MRI using a full body radio-frequency (RF) coil or a head transmit coil that extends over the chest area, patients for whom test stimulation is unsuccessful, or patients who are unable to properly operate the neurostimulator. Also, diathermy (e.g., shortwave diathermy, microwave diathermy or therapeutic ultrasound diathermy) is contraindicated because diathermy's energy can be transferred through the implanted system (or any of the separate implanted components), which can cause tissue damage and can result in severe injury or death. Diathermy can damage parts of the neurostimulation system.

Warnings/Precautions/Adverse Events:
There is a potential risk of tissue damage using stimulation parameter settings of high amplitudes and wide pulse widths. Extreme care should be used with lead implantation in patients with a heightened risk of intracranial hemorrhage. Do not place the lead-extension connector in the soft tissues of the neck. Placement in this location has been associated with an increased incidence of lead fracture. Theft detectors and security screening devices may cause stimulation to switch ON or OFF, and may cause some patients to experience a momentary increase in perceived stimulation. Although some MRI procedures can be performed safely with an implanted Activa System, clinicians should carefully weigh the decision to use MRI in patients with an implanted Activa System. MRI can cause induced voltages in the neurostimulator and/or lead possibly causing uncomfortable, jolting, or shocking levels of stimulation. MRI image quality may be reduced for patients who require the neurostimulator to control tremor, because the tremor may return when the neurostimulator is turned off.

Severe burns could result if the neurostimulator case is ruptured or pierced. The Activa System may be affected by or adversely affect medical equipment such as cardiac pacemakers or therapies, cardioverter/ defibrillators, external defibrillators, ultrasonic equipment, electrocautery, or radiation therapy. Safety and effectiveness has not been established for patients with neurological disease other than Parkinson's disease or Essential Tremor, previous surgical ablation procedures, dementia, coagulopathies, or moderate to severe depression; or for patients who are pregnant, under 18 years, over 75 years of age (Parkinson's Control Therapy) or over 80 years of age (Tremor Control Therapy). Adverse events related to the therapy, device, or procedure can include: stimulation not effective, cognitive disorders, pain, dyskinesia, dystonia, speech disorders including dysarthria, infection, paresthesia, intracranial hemorrhage, electromagnetic interference, cardiovascular events, visual disturbances, sensory disturbances, device migration, paresis/asthenia, abnormal gait, incoordination, headaches, lead repositioning, thinking abnormal, device explant, hemiplegia, lead fracture, seizures, respiratory events, and shocking or jolting stimulation.

Rx only
# Program at a Glance

<table>
<thead>
<tr>
<th>Time</th>
<th>Sunday, June 13</th>
<th>Monday, June 14</th>
<th>Tuesday, June 15</th>
<th>Wednesday, June 16</th>
<th>Thursday, June 17</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:00 AM</td>
<td>Committees and Workgroups</td>
<td>Committees and Workgroups</td>
<td>Committees and Workgroups</td>
<td>Committees and Workgroups</td>
<td>7:00 AM</td>
</tr>
<tr>
<td>8:00 AM</td>
<td>kickoff Seminar 1A</td>
<td>kickoff Seminar 1B</td>
<td>Plenary Session 1</td>
<td>Parallel Sessions 1 &amp; 2 Platform Presentations</td>
<td>8:00 AM</td>
</tr>
<tr>
<td>9:00 AM</td>
<td>kickoff Seminar 2</td>
<td>kickoff Seminar 3</td>
<td>Plenary Session 1 &amp; 2 Platform Presentations</td>
<td>MDS Business Meeting</td>
<td>9:00 AM</td>
</tr>
<tr>
<td>10:00 AM</td>
<td>kickoff Seminar 6</td>
<td>kickoff Seminar 7</td>
<td>MDS Business Meeting</td>
<td>Fahn Lecture</td>
<td>10:00 AM</td>
</tr>
<tr>
<td>11:00 AM</td>
<td>Marsden Lecture</td>
<td>Junior Awards</td>
<td>Poster Session 2 Odd Numbers</td>
<td>Poster Session 3 Odd Numbers</td>
<td>11:00 AM</td>
</tr>
<tr>
<td>12:00 PM</td>
<td>Poster Session 1 Odd Numbers</td>
<td>Lunch Break</td>
<td>Lunch Break</td>
<td>Lunch Break</td>
<td>12:00 PM</td>
</tr>
<tr>
<td>1:00 PM</td>
<td>kickoff Seminar 5</td>
<td>kickoff Seminar 6</td>
<td>Plenary Session 2</td>
<td>Parallel Sessions 3 &amp; 4</td>
<td>1:00 PM</td>
</tr>
<tr>
<td>2:00 PM</td>
<td>kickoff Seminar 7</td>
<td>kickoff Seminar 8</td>
<td>Plenary Session 1 Even Numbers</td>
<td>Poster Session 2 Even Numbers</td>
<td>2:00 PM</td>
</tr>
<tr>
<td>3:00 PM</td>
<td>kickoff Seminar 9</td>
<td>kickoff Seminar 10</td>
<td>Poster Session 1 Even Numbers</td>
<td>Poster Session 2 Even Numbers</td>
<td>3:00 PM</td>
</tr>
<tr>
<td>4:00 PM</td>
<td>Seminar Series</td>
<td>Seminar Series</td>
<td>Seminar Series</td>
<td>Seminar Series</td>
<td>4:00 PM</td>
</tr>
<tr>
<td>5:00 PM</td>
<td>Seminar Series</td>
<td>Seminar Series</td>
<td>Seminar Series</td>
<td>Seminar Series</td>
<td>5:00 PM</td>
</tr>
<tr>
<td>6:00 PM</td>
<td>kickoff Seminar 11</td>
<td>kickoff Seminar 12</td>
<td>Plenary Session 2</td>
<td>Parallel Sessions 3 &amp; 4</td>
<td>6:00 PM</td>
</tr>
<tr>
<td>7:00 PM</td>
<td>Video Dinners</td>
<td>Video Dinners</td>
<td>Video Dinners</td>
<td>Video Dinners</td>
<td>7:00 PM</td>
</tr>
<tr>
<td>8:00 PM</td>
<td>Congress Banquet</td>
<td>Congress Banquet</td>
<td>Congress Banquet</td>
<td>Congress Banquet</td>
<td>8:00 PM</td>
</tr>
<tr>
<td>9:00 PM</td>
<td>Opening Ceremony</td>
<td>Welcome Reception</td>
<td>Welcome Reception</td>
<td>Welcome Reception</td>
<td>9:00 PM</td>
</tr>
<tr>
<td>10:00 PM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10:00 PM</td>
</tr>
</tbody>
</table>
SUNDAY, JUNE 13, 2004

KICKOFF SEMINARS

8:30 am to 9:30 am
Kickoff Seminar 1A: Managing Parkinson’s disease: turning off to on
Location: Salone Della Cultura, Ground Floor
Sponsored by The Movement Disorder Society.
Supported through an unrestricted educational grant from Bertek Pharmaceuticals, Inc.
Chairs: William Koller
New York, NY, USA
Fabrizio Stocchi
Rome, Italy
The history of apomorphine
Andrew Lees
London, United Kingdom
Apomorphine as a rescue agent in Parkinson’s disease
Mark Stacy
Durham, NC, USA
Panel discussion

At the conclusion of this session, participants should be able to: 1. Describe the motor complications associated with advanced Parkinson’s disease; 2. Discuss the history of apomorphine and its use as a “rescue agent” in Parkinson’s disease; 3. Explain when “rescue therapy” is needed in Parkinson’s disease; 4. Use an apomorphine injectable pen and instruct patients in its appropriate handling.

8:30 am to 9:30 am
Kickoff Seminar 1B: Essential tremor: new insights into cause and treatment
Location: Assembly Hall, Ground Floor
Sponsored by The Movement Disorder Society.
Supported through an unrestricted educational grant from Ortho-McNeil Pharmaceutical.
Chair: Mark Hallett
Bethesda, MD, USA
Medical and surgical treatment of essential tremor
Joseph Jankovic
Houston, TX, USA
Pathophysiology of essential tremor
Günter Deuschi
Kiel, Germany
Panel discussion

At the conclusion of the session, participants should be able to: 1. Describe how to identify and diagnose depression in patients with Parkinson’s disease; 2. Describe which rating scales should be used to evaluate the severity of depression in PD; 3. Describe what are the effective therapeutic approaches for depression in PD.

10:00 am to 11:00 am
Kickoff Seminar 2: Depression in Parkinson’s disease: role of dopamine agonists
Location: Assembly Hall, Ground Floor
Sponsored by The Movement Disorder Society.
Supported through an unrestricted educational grant from Boehringer Ingelheim International GmbH.
Chairs: Heinz Reichmann
Dresden, Germany
Yoshikuni Mizuno
Tokyo, Japan
Depression in Parkinson’s disease: clinical features and significance
Christopher G. Goetz
Chicago, IL, USA
Role of dopamine agonists in the treatment of depression in Parkinson’s disease
Paolo Barone
Napoli, Italy
Panel discussion

At the conclusion of the session, participants should be able to: 1. Describe how to identify and diagnose depression in patients with Parkinson’s disease; 2. Discuss the history of apomorphine and its use as a “rescue agent” in Parkinson’s disease; 3. Explain when “rescue therapy” is needed in Parkinson’s disease; 4. Use an apomorphine injectable pen and instruct patients in its appropriate handling.

10:00 am to 12:00 pm
Kickoff Seminar 3: Restless legs syndrome: advances in diagnosis and treatment
Location: Salone Della Cultura, Ground Floor
Sponsored by The Movement Disorder Society.
Supported through an unrestricted educational grant from Pfizer, Inc.
Chairs: Claudia Trenkwalder
Kassel, Germany
Jacques Montplaisir
Montreal, Canada
Update on etiology and pathogenesis
Ray Chaudhuri
London, United Kingdom
Diagnosis and differential diagnosis
Diego Garcia Borreguero
Madrid, Spain
Non-dopaminergic treatment
Arthur S. Walters
Edison, NJ, USA
Dopaminergic treatment
Per Odin
Bremerhave, Germany
Panel discussion

In sessions not listing learning objectives, specific objectives will be shared with participants at the beginning of the session.
SCIENTIFIC PROGRAM

11:30 am to 12:30 pm
Kickoff Seminar 4: Neuroimaging
Location: Assembly Hall, Ground Floor
Sponsored by The Movement Disorder Society.
Supported through an unrestricted educational grant from Amersham Health.
Chairs: Andrew Lees
London, United Kingdom
Wolfgang Oertel
Marburg, Germany
Use of imaging for diagnosis and assessment of therapy in Parkinson’s disease
David J. Brooks
London, United Kingdom
Neuroimaging in other Movement Disorders
A. Jon Stoessl
Vancouver, Canada
Panel discussion
At the conclusion of this session, participants should be able to: 1. Understand the basic principles of PET and SPECT imaging in Parkinson’s disease; 2. Explain the role of SPECT and PET imaging in diagnosis and therapy of Parkinson’s disease; 3. Define the role of SPECT and PET imaging in diagnosis of other Movement Disorders; 4. Highlight the clinical value of dopamine transporter imaging in the routine work-up of patients with Movement Disorders; 5. To assess the role of imaging as a surrogate marker for disease progression in parkinsonian syndromes.

1:00 pm to 3:00 pm
Kickoff Seminar 5: Dopamine Agonists—New perspectives in the treatment of Parkinson’s disease and restless legs syndrome
Location: Salone Della Cultura, Ground Floor
Sponsored by The Movement Disorder Society.
Supported through an unrestricted educational grant from GlaxoSmithKline.
Chairs: Amos Korczyn
Ramat Aviv, Israel
Joaquim Ferreira
Torres Vedras, Portugal
Dopamine agonists—historical perspectives in Parkinson’s disease
Kapil Sethi
Augusta, GA, USA
Restless legs syndrome—pathophysiology
Walter Paulus
Gottingen, Germany
Restless legs syndrome—diagnosis and significance to patients
Thomas Roth
Detroit, MI, USA
Restless legs syndrome—treatment
Richard Allen
Bethesda, MD, USA
Panel discussion
At the conclusion of this session, participants should be able to: 1. Discuss the syndrome, understand how to diagnose and treat it and explain the theories on it; 2. Describe pathogenisis.

1:30 pm to 2:30 pm
Kickoff Seminar 6: Transdermal delivery of dopaminergic drugs
Location: Assembly Hall, Ground Floor
Sponsored by The Movement Disorder Society.
Supported through an unrestricted educational grant from Schwarz Pharma.
Chairs: Niall Quinn
London, United Kingdom
William Weiner
Baltimore, MD, USA
Novel transdermal delivery approaches for Parkinson’s disease
Cheryl Waters
New York, NY, USA
Panel discussion
3:00 pm to 4:00 pm
Kickoff Seminar 7: Addressing dementia and neuropsychiatric issues in Parkinson’s disease
Location: Assembly Hall, Ground Floor
Sponsored by The Movement Disorder Society. Supported through an unrestricted educational grant from Novartis Pharma.
Chairs: Bruno Dubois, Paris, France
Ian McKeith, Newcastle Upon Tyne, United Kingdom
The challenges of dementia and neuropsychiatric symptoms in Parkinson’s disease
Ray Watts, Birmingham, AL, USA
Treatment options in Parkinson’s disease dementia and dementia with Lewy bodies
Murat Emre, Capa Istanbul, Turkey
Panel discussion

3:30 pm to 5:30 pm
Kickoff Seminar 8: New directions in the treatment of Parkinson’s disease using MAO-B inhibitors and propargylamines
Location: Salone Della Cultura, Ground Floor
Sponsored by The Movement Disorder Society. Supported through an unrestricted educational grant from Teva Pharmaceutical Industries Ltd., Teva Neuroscience, Lundbeck and Eisai.
Chairs: Anthony E. Lang, Toronto, Canada
Werner Poewe, Innsbruck, Austria
Role in the treatment of early disease
Matthew B. Stern, Philadelphia, PA, USA
Role in the treatment of advanced disease
Olivier Rascol, Toulouse, France
Rationale and potential for modifying disease progression
Ira Shoulson, Rochester, NY, USA
Panel discussion

4:30 pm to 5:30 pm
Kickoff Seminar 9: Is botulinum toxin toxic?
Location: Assembly Hall, Ground Floor
Sponsored by The Movement Disorder Society. Supported through an unrestricted educational grant from Allergan, Inc.
Chairs: Alfredo Berardelli, Rome, Italy
Cynthia L. Comella, Chicago, IL, USA
Are there long-term toxicity issues?
Markus Naumann, Wuerzburg, Germany
Immunogenicity and long-term botulinum toxin administration
Joseph Jankovic, Houston, TX, USA
Panel discussion

At the conclusion of this session, participants should be able to: 1. List factors associated with the occurrence of BTX-A adverse events; 2. Discuss long term benefits and safety of botulinum toxin for cervical dystonia; 3. List risk factors for the development of immunogenicity against botulinum toxin.
SCIENTIFIC PROGRAM

6:00 pm to 8:00 pm
Kickoff Seminar 10: Dopamine agonists as potential disease modifying therapy in Parkinson’s disease
Location: Salone Della Cultura, Ground Floor

Sponsored by The Movement Disorder Society.
Supported through an unrestricted educational grant from Pfizer, Inc.

Chairs: Oscar Gershanik
        Buenos Aires, Argentina
        Anthony H.V. Schapira
        London, United Kingdom

Etiology of Parkinson’s disease
Etienne Hirsch
Paris, France

Motor and non-motor complications of levodopa-treated Parkinson’s disease
Eduardo Tolosa
Barcelona, Spain

Dopamine agonists in the prevention and treatment of motor and non-motor complications
José Obeso
Pamplona, Spain

Dopamine agonists as putative neuroprotective agents
Ken Marek
New Haven, CT, USA

Panel discussion

At the conclusion of this session, participants should be able to: 1. Describe some of the hypothesis that presently try to explain the etiology and pathogenesis of Parkinson's disease; 2. Discuss the controversies related to the putative neuroprotective effects of dopamine agonists and the tools used in their evaluation; 3. Recognize the motor and non-motor complications that affect PD patients under long-term levodopa treatment.

6:00 pm to 8:00 pm
Location: Assembly Hall, Ground Floor

Sponsored by The Movement Disorder Society.
Supported through an unrestricted educational grant from Novartis Pharma/Orion Pharma.

Chairs: Yves Agid
        Paris, France
        C. Warren Olanow
        New York, NY, USA

Levodopa-related motor complications
Eldad Melamed
Petah Tiqva, Israel

CDS approaches to animal models in Parkinson’s disease
Peter Jenner
London, United Kingdom

CDS approaches to treating Parkinson’s disease patients
Fabrizio Stocchi
Rome, Italy

COMT inhibitors in the treatment of Parkinson’s disease
Robert Hauser
Tampa, FL, USA

Panel discussion
MONDAY, JUNE 14, 2004

8:30 am to 11:00 am
Plenary Session 1: Etiopathogenesis of cell death in Parkinson’s disease
Location: Salone Della Cultura, Ground Floor
Chair: C. Warren Olanow
New York, NY, USA
Co-chair: Etienne Hirsch
Paris, France
Etiology: Update on genetic and environmental factors of cell death
J.W. Langston
Sunnyvale, CA, USA
Genetic causes of Parkinson’s disease
John Hardy
Bethesda, MD, USA
Pathogenesis: Role of mitochondria, oxidative stress, inflammation and excitotoxicity in neurodegeneration
Serge Przedborski
New York, NY, USA
The UPS and models of Parkinson’s disease
Kevin McNaught
New York, NY, USA

At the conclusion of this session, participants should be able to:
1. List the major factors involved in the etiopathogenesis of Parkinson’s disease;
2. Describe the mechanisms potentially involved in the mechanism of neuronal degeneration in Parkinson’s disease;
3. Explain the role of protein processing in the etiopathogenesis of Parkinson’s disease.

11:00 am to 11:30 am
C. David Marsden Lecture
The value of transgenic and gene targeted models for experimental therapeutics of neurodegenerative diseases
Location: Salone Della Cultura, Ground Floor
Donald Price
Baltimore, MD, USA

11:30 am to 12:00 pm
Junior Awards
Location: Salone Della Cultura, Ground Floor

12:00 pm to 1:00 pm
Abstract Poster Session 1
Location: Poster Area, First Floor
Abstract Numbers 1-344
Authors present odd numbers

1:00 pm to 1:30 pm
Lunch
Location: Rooftop Terrace and Various Locations

1:30 pm to 4:00 pm
Plenary Session 2: The basal ganglia pathophysiological model: contributions and limitations
Location: Salone Della Cultura, Ground Floor
Chair: José Obeso
Pamplona, Spain
Co-chair: Nobuo Yanagisawa
Kawasaki-City, Japan
Introduction: the model
Nobuo Yanagisawa
Kawasaki-City, Japan
Anatomical chemical organization of the basal ganglia: misconceptions
Hagai Bergman
Jerusalem, Israel
Dopamine depletion and modification of basal ganglia activity
Erwan Bezard
Bordeaux, France
Functional imaging of the basal ganglia
Joel Perlmutter
St. Louis, MO, USA
Neuronal activity and Movement Disorders: firing, rhythms and patterns
Peter Brown
London, United Kingdom
Consequence of lesion of the basal ganglia in man
John Rothwell
London, United Kingdom
Conclusion: lessons from the model
José Obeso
Pamplona, Spain

4:00 pm to 5:00 pm
Abstract Poster Session 1
Location: Poster Area, First Floor
Abstract Numbers 1-344
Authors present even numbers
5:00 pm to 6:30 pm
Seminar Series
Sessions featuring Italian cuisine are featured on Monday. Each session offers an expert’s view on Movement Disorders through a variety of topics. To encourage discussion and interaction, the seminar series have limited registration and a ticket is required for admission.
Fee: $55 USD/ $40 USD for junior participants and allied health professionals.

S101 Advances in stiff person syndrome
Location: Meeting Room 5, First Floor
Philip Thompson
North Terrace, Adelaide, Australia
Hans Meinck
Heidelberg, Germany
At the conclusion of this session, participants should be able to: 1. Identify the clinical manifestations of the stiff man syndrome and its variants; 2. Describe the appropriate diagnostic tests to confirm the diagnosis status and to rule out other relevant diseases; 3. Discuss the therapeutic options.

S102 Ataxias
Location: Meeting Room 1, First Floor
S.H. Subramony
Jackson, MS, USA
Stefan Pulst
Los Angeles, CA, USA
At the conclusion of this session, participants should be able to: 1. Recognize the clinical manifestations of inherited ataxias and discuss their differential diagnosis; 2. Describe the use of genetic tests and be familiar with their interpretation; 3. Discuss the pathogenesis of recessive and dominant ataxias.

S103 Autonomic nervous system function in neurodegenerative disease
Location: Meeting Room 6, First Floor
Horacio Kaufmann
New York, NY, USA
Ronald Pfeiffer
Memphis, TN, USA
At the conclusion of this session, participants should be able to: 1. Recognize autonomic dysfunction is a frequent and sometimes dominant feature of the “synucleinopathic” neurodegenerative Movement Disorders such such as Parkinson’s disease multiple system atrophy, and dementia with Lewy bodies; 2. Identify the specific cardiovascular, sexual, urinary and gastrointestinal features of autonomic dysfunction in neurodegenerative Movement Disorders; 3. Discuss appropriate diagnostic and treatment approaches for the cardiovascular, sexual, urinary and gastrointestinal manifestations of autonomic dysfunction in neurodegenerative Movement Disorders.

S104 Case management: Parkinson’s disease
Location: Meeting Room 3, First Floor
Christopher Goetz
Chicago, IL, USA
Cheryl Waters
New York, NY, USA
At the conclusion of this session, participants should be able to: 1. Define treatment options for Parkinson’s disease based on current evidence from clinical trials; 2. Discuss treatment options for Parkinson’s disease, combining evidence from clinical trials with practice experience; 3. Recognize management options that are problem-specific for the treatment of Parkinson’s disease at different phases of disease progression.

S105 Parkinson’s disease in the elderly (diagnosis and management)
Location: Meeting Room 7, Ground Floor
Giovanni Fabbrini
Rome, Italy
François Tison
Pessac, France
At the conclusion of this session, participants should be able to: 1. Discuss the general principals of differential diagnosis in the elderly parkinsonian patients; 2. Describe the clinical phenotype and the clinical problems of aged parkinsonian patients, with regard to the biological pattern of neurodegeneration observed in the elderly, the general comorbidities, the incidence of dementia and psychiatric disturbances; 3. Discuss the currently available treatment in elderly parkinsonian patients, with regard to the paucity of controlled studies, the differences in the pharmacokinetic and pharmacodynamic of antiparkinsonian drugs in this population.

S106 Parkinsonism - PSP/CBGD: clinical update
Location: Meeting Room 2, First Floor
Peter Pramstaller
Bolzano, Italy
Lawrence Golbe
New Brunswick, NJ, USA
At the conclusion of this session, participants should be able to: 1. Recognize the clinical features of progressive supranuclear palsy and corticobasal degeneration and be able to apply formal clinical diagnostic criteria to distinguish PSP and CBD from each other and from competing diagnostic considerations; 2. Explain the clinical deficits of PSP and CBD to patients and caregivers in order to help them avoid complications of the illness, including those caused by unnecessary diagnostic testing and useless treatments; 3. Describe current understanding of the etiology and pathogenesis of the brain degeneration in PSP and CBD, including what is known of the genetic and toxic factors so that they can provide informed answers to patients’ and families’ questions regarding familial and occupational risks.
S107  Pediatric Movement Disorders
Location: Meeting Room 4, First Floor
Robert Surtees
London, United Kingdom
Terence Sanger
Stanford, CA, USA
At the conclusion of this session, participants should be able to: 1. Recognize the most common pediatric Movement Disorders; 2. List the most common treatments of childhood Movement Disorders; 3. Explain the differential diagnosis of the most common pediatric Movement Disorders.

S108  Restless legs syndrome
Location: Meeting Room 8, Ground Floor
Richard Allen
Arnold, MD, USA
Claudia Trenkwalder
Kassel, Germany
At the conclusion of this session, participants should be able to: 1. Describe and define the key features of restless legs syndrome including the essential definition criteria and the role of sleep disturbance; 2. Discuss the differential diagnosis that are important to differentiate RLS from i.e. polyneuropathy, sleep apnea with PLM, PLMD and to explain possible pathophysiological concepts of RLS; 3. Indicate the appropriate treatment strategies for RLS including dopaminergic medication, opirids, gabapentin and others.
Safety and effectiveness in the pediatric population have not been established.

REQUIP has been associated with sedating effects, including somnolence, and the possibility of falling asleep while engaged in activities of daily living, including operation of a motor vehicle. Syncope or symptomatic hypotension may occur more frequently during initial treatment or with an increase in dose. Hallucinations may occur at any time during treatment. REQUIP may potentiate the dopaminergic side effects of l-dopa and may cause and/or exacerbate pre-existing dyskinesias.
REQUIP® (ropinirole hydrochloride) Tablets

**BRIEF SUMMARY**

The following is a brief summary only; see full prescribing information for complete product information.

**INDICATIONS AND USAGE**

REQUIP® is indicated for the treatment of Parkinson's disease. The effectiveness of REQUIP® was demonstrated in randomized, controlled trials in patients with early Parkinson's disease who were not receiving concomitant L-dopa therapy as well as in patients with advanced disease or concomitant L-dopa.

**CONTRAINDICATIONS**

REQUIP® is contraindicated for patients known to have hypersensitivity to the drug. Patients with treatment-emergent falling asleep while engaged in activities of daily living, including the operation of motor vehicles which sometimes involves sudden, unexpected, and brief episodes of sleep (sleepwalking) or somnolence, have also been reported. It should also be recognized that patients may experience impairments in judgment, thinking, and motor skills, and these impairments may persist for several hours after the last dose of REQUIP®.

**WARNINGS**

The development of motor fluctuations, including on-off fluctuations and dyskinesias, in patients treated with REQUIP® has been reported. The incidence of these side effects may be reduced by decreasing the dose of concomitant L-Dopa. Patients with Parkinson's disease who have been treated with LEVODOPA and who have developed motor fluctuations may experience exacerbation of their motor signs and symptoms when switching to REQUIP®. These patients should be followed closely for any signs or symptoms of motor fluctuations and, if necessary, their L-Dopa dose should be increased and the REQUIP® dose decreased. If motor fluctuations persist, consideration should be given to discontinuing treatment with REQUIP®.

**PRECAUTIONS**

**Drug Interactions**

In vitro metabolism studies showed that CYP2D6 was the major enzyme responsible for metabolism of reboxetine. There is the potential for substrates or inhibitors of this enzyme when coadministered with reboxetine to alter its clearance. Therefore, if a drug known to be a potent inhibitor of CYP2D6 is started during treatment with REQUIP®, coadministration should be avoided or the dose of REQUIP® should be reduced. If CYP2D6 is involved in the disposition of other concomitantly administered drugs, the overall clearance of these drugs may be increased or decreased, and the plasma concentration may be altered, depending on whether the concomitantly administered drug is a CYP2D6 inhibitor or an inducer. In turn, the dose of these drugs may need to be adjusted.

**Pregnancy**

The safety and effectiveness of REQUIP® in the treatment of Parkinson's disease in pregnancy have not been established. USE IN PREGNANCY: Category C. REQUIP® should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

**NURSE-ADMINISTRATION**

REQUIP® tablets should be swallowed whole. Swallowing the REQUIP® tablet whole allows for more uniform drug delivery and avoids the potential for gastrointestinal irritation that could occur with crushing or chewing. In studies of elderly patients, REQUIP® appears to have a first-order elimination half-life of approximately 18 hours. In elderly patients, REQUIP® tablet absorption is similar to that observed in younger patients. The bioavailability of the tablet formulation is usually greater than 80% or less than 20%.

**ADVERSE REACTIONS**

**Incomplete Data**

The reported incidence of adverse events was based on combined experience from patients with Parkinson’s disease who received LEVODOPA and who have developed motor fluctuations may experience exacerbation of their motor signs and symptoms when switching to REQUIP®. These patients should be followed closely for any signs or symptoms of motor fluctuations and, if necessary, their L-Dopa dose should be increased and the REQUIP® dose decreased. If motor fluctuations persist, consideration should be given to discontinuing treatment with REQUIP®.

**In general, the reported incidence of adverse events was based on combined experience from patients with early Parkinson’s disease who were not receiving concomitant L-Dopa therapy as well as in patients with advanced disease or concomitant L-dopa.**

**Drug Interactions**

In vitro metabolism studies showed that CYP2D6 was the major enzyme responsible for metabolism of reboxetine. There is the potential for substrates or inhibitors of this enzyme when coadministered with reboxetine to alter its clearance. Therefore, if a drug known to be a potent inhibitor of CYP2D6 is started during treatment with REQUIP®, coadministration should be avoided or the dose of REQUIP® should be reduced. If CYP2D6 is involved in the disposition of other concomitantly administered drugs, the overall clearance of these drugs may be increased or decreased, and the plasma concentration may be altered, depending on whether the concomitantly administered drug is a CYP2D6 inhibitor or an inducer. In turn, the dose of these drugs may need to be adjusted.

**Pregnancy**

The safety and effectiveness of REQUIP® in the treatment of Parkinson's disease in pregnancy have not been established. USE IN PREGNANCY: Category C. REQUIP® should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.
TUESDAY, JUNE 15, 2004

8:30 am to 10:30 am
Parallel Session 1: Platform Presentations: Parkinson’s disease
Location: Salone Della Cultura, Ground Floor
Chair: Cynthia Comella
Chicago, IL, USA
Co-chair: Wolfgang Oertel
Marburg, Germany

Identification of PARK6, a novel mitochondrial protein causing Parkinson’s disease
Enza Maria Valente
Abstract Number: P1042
Endocannabinoid levels are altered in parkinsonism and L-DOPA-induced dyskinesia in the MPTP-lesioned macaque
Susan Fox
Abstract Number: P1163
Parkinsonian signs in older people in the community and risk of incident dementia: A prospective longitudinal population-based study
Elan Louis
Abstract Number: P954
Combined use of NMDA and AMPA antagonists further reduces levodopa-induced dyskinesias in MPTP-lesioned primates
Francesco Bibbiani
Abstract Number: P606
Predicting incident non-motor complications of dopaminergic therapy in patients with early Parkinson’s disease: A secondary analysis of the CALM-PD trial
Kevin Biglan
Abstract Number: P576
Is levodopa-induced dyskinesias risk decreased in parkinsonian patients initially treated with dopamine agonist? A longitudinal study among 425 patients
Franck Durif
Abstract Number: P608
Neuronal activity of zona incerta in Parkinson’s disease patients
Marcelo Merello
Abstract Number: P894
Predicting success after deep brain stimulation placement in the subthalamic nucleus in Parkinson’s disease patients
Roy Bakay
Abstract Number: P947
Parallel Session 2: Platform Presentations: Other Movement Disorders
Location: Assembly Hall, Ground Floor
Chair: Peter Riederer
Wuerzburg, Germany
Co-chair: Murat Emre
Capa Istanbul, Turkey
Nicotine corrects impaired motor-motor and afferent sensory inhibition in patients with Gilles de la Tourette syndrome
Michael Orth
Abstract Number: P156
Is Obsessive Compulsive Disorder (OCD) a sensorimotor integration dysfunction? Evidence from a gating study in a SEP paradigm
Simone Rossi
Abstract Number: P124
Long term prognosis of psychogenic Movement Disorders
Madhavi Thomas
Abstract Number: P1263
Misdiagnosis of fragile X associated tremor/ataxia syndrome (FXTAS)
Maureen Leehey
Abstract Number: P985
Characteristics of two distinct clinical phenotypes observed in pathologically proven progressive supranuclear palsy: Richardson’s syndrome and PSP-Parkinsonism
David Williams
Abstract Number: P955
Pallidal stimulation to treat tardive dyskinesia: Preliminary report of the French multicentric study STARDYS
Philippe Damier
Abstract Number: P900
Gait and motor disturbances are correlated with age-related white matter changes - Cross-sectional results of the LADIS (Leukoaraiosis And DISability) project
Hansjoerg Baehner
Abstract Number: P982
Experimental evidence for a toxic etiology of Guadeloupean parkinsonism
Annie Lannuzel
Abstract Number: P977

12:30 pm to 1:30 pm
Lunch
Location: Rooftop Terrace and Various Locations

1:30 pm to 4:00 pm
Parallel Session 3: Cognitive and behavioral dysfunction in Movement Disorders
Location: Salone Della Cultura, Ground Floor
Chair: Bruno Dubois
Paris, France
Co-chair: I.G. McKeith
Newcastle Upon Tyne, United Kingdom
Cognitive changes and dementia in Parkinson’s disease
Murat Emre
Istanbul, Turkey
Anatomical and physiological basis of cognitive and behavioral changes in Movement Disorders
Peter Strick
Pittsburg, PA, USA
Motivation, apathy and the basal ganglia
Richard Levy
Paris, France
Executive function and basal ganglia
Adrian Owen
Cambridge, United Kingdom
Reward and the basal ganglia
Mandar Jog
London, Canada
At the conclusion of this session, participants should be able to: 1. Describe the pattern of cognitive changes and dementia associated with Parkinson’s disease and related disorders; 2. Recognize the role of the basal ganglia in the regulation of motivation and the mechanism of apathy in patients with lesions of the basal ganglia; 3. Recognize the involvement of the basal ganglia in executive functions and other frontal lobe-related processes.

10:30 am to 11:30 am
MDS Business Meeting
Location: Salone Della Cultura, Ground Floor

11:30 am to 12:30 pm
Abstract Poster Session 2
Location: Poster Area, First Floor
Abstract Numbers 345-694
Authors present odd numbers
Parallel Session 4: Update on other Movement Disorders
Location: Assembly Hall, Ground Floor
Chair: Ira Shoulson
Rochester, NY, USA
Co-chair: Anne Young
Boston, MA, USA

- Update on dystonia
  Enza Maria Valente
  Rome, Italy

- Update on Huntington’s disease
  Elena Cattaneo
  Milano, Italy

- Update on Friedreich’s ataxia
  Anthony H. V. Schapira
  London, United Kingdom

- Update on psychogenic Movement Disorders
  Mark Hallett
  Bethesda, MD, USA

- Update on essential tremor
  Elan Louis
  New York, NY, USA

At the conclusion of this session, participants should be able to: 1. Describe the latest research in Huntington’s disease; 2. Describe the latest update in essential tremor; 3. Describe the latest research in dystonia; 4. Describe the latest update in psychogenic Movement Disorders; 5. Describe the latest update in essential tremor.

4:00 pm to 5:00 pm
Abstract Poster Session 2
Location: Poster Area, First Floor
Abstract Numbers 345-694
Authors present even numbers

5:00 pm to 6:30 pm
Seminar Series
Sessions featuring Italian cuisine are featured on Tuesday. Each session offers an expert’s view on Movement Disorders through a variety of topics. To encourage discussion and interaction, Seminar Series have limited registration and a ticket is required for admission.
Fee: $55 USD/ $40 USD for junior participants and allied health professionals.

S202 Rare genetic Movement Disorders (PKAN, Wilson’s, acanthocytosis, etc.)
Location: Meeting Room 3, First Floor
Peter LeWitt
Southfield, MI, USA
Kailash Bhatia
London, United Kingdom

At the conclusion of this session, participants should be able to: 1. Recognize typical clinical features of several rare genetic Movement Disorders, including Wilson’s disease, neuroacanthocytosis, PKAN, neuroferritinopathy and others; 2. Discuss the diagnostic options for differentiating these Movement Disorders, and define these various available genetic tests; 3. Indicate the available management strategies and the natural history of these Movement Disorders.

S203 Facial dyskinesias
Location: Meeting Room 5, First Floor
Ryuji Kaji
Tokushima City, Japan
Josep Valls-Solé
Barcelona, Spain

At the conclusion of this session, participants should be able to: 1. Describe the most relevant syndromes presenting with facial dyskinesias; 2. Recognize the most relevant clinical and electrophysiological features that characterize each of the syndromes presenting with facial dyskinesias; 3. Discuss the key electrophysiological features useful for differential diagnosis between disorders presenting with facial dyskinesias.

S204 Dementia with Lewy bodies
Location: Meeting Room 6, First Floor
Daniel Perl
New York, NY, USA
David John Burn
Newcastle Upon Tyne, United Kingdom

S205 Magnetic stimulation in Movement Disorders
Location: Meeting Room 7, Ground Floor
Antonio Currà
Rome, Italy
Robert Chen
Toronto, Canada

At the conclusion of this session, participants should be able to: 1. Describe basic principles, utility, safety and limitations of transcranial magnetic stimulation (TMS); 2. Discuss the main TMS findings in common Movement Disorders such as Parkinson’s disease, dystonia, chorea, tremor, myoclonus and tics; 3. Identify the current and possible future clinical and research applications of TMS in Movement Disorders.
S206  Epidemiology and genetics of Parkinson’s disease  
Location: Meeting Room 8, Ground Floor  
Vincenzo Bonifati  
Rome, Italy  
Caroline Tanner  
Sunnyvale, CA, USA  

At the conclusion of this session, participants should be able to: 1. Describe the demographics and international distribution of Parkinson’s disease; 2. Describe the genetic determinants of parkinsonism; 3. Understand the factors proposed to increase or decrease susceptibility to developing Parkinson’s disease.

S207  The New UPDRS  
Location: Meeting Room 2, First Floor  
Stanley Fahn  
New York, NY, USA  
Christopher G. Goetz  
Chicago, IL, USA  

At the conclusion of this session, participants should be able to: 1. Define the hallmarks of the original and new versions of the UPDRS; 2. Identify the new changes and their rationales; 3. Recognize the plans for clinimetric testing of the new UPDRS so that the old and new versions can be compared.

S208  Principles of animal models in Movement Disorders  
Location: Meeting Room 4, First Floor  
Ted M. Dawson  
Baltimore, MD, USA  
Jie Shen  
Boston, MA, USA  

V101  Atypical parkinsonism  
Location: Meeting Room 1, First Floor  
Eduardo Tolosa  
Barcelona, Spain  
Niall Quinn  
London, United Kingdom  

At the conclusion of this session, participants should be able to: 1. Recognize clinical features suggestive of atypical parkinsonism; 2. Identify individual specific causes of atypical parkinsonism; 3. Discuss the differential diagnosis between different causes of atypical parkinsonism.

V102  Dystonia  
Location: Meeting Room 3, First Floor  
Susan Bressman  
Englewood, NJ, USA  
Joseph Jankovic  
Houston, TX, USA  

At the conclusion of this session, participants should be able to: 1. Recognize the phenomenology of generalized, segmental and focal dystonia, as illustrated by videos; 2. Discuss the etiologic, including genetic, classification of dystonia; 3. Discuss therapeutic strategies in dystonia, including pharmacological, chemodeneration, and surgical approaches.

V103  Gait disorders  
Location: Meeting Room 2, First Floor  
John Nutt  
Portland, OR, USA  
Roger Elble  
Springfield, IL, USA  

At the conclusion of this session, participants should be able to: 1. Describe the clinical differences between highest-level and lower-level gait disorders; 2. Recognize the common and uncommon gait disorders caused by pathology of the central and peripheral nervous system; 3. Discuss unusual gait disorders submitted by anyone attending the seminar.

V104  Myoclonus/startle and other jerks  
Location: Meeting Room 4, First Floor  
Steven Frucht  
New York, NY, USA  
Hiroshi Shibasaki  
Bethesda, MD, USA  

At the conclusion of this session, participants should be able to: 1. Recognize the major forms of myoclonus and startle syndromes; 2. List the possible etiologies of form of myoclonus and startle; 3. Describe the various treatment options for these disorders.
SCIENTIFIC PROGRAM

WEDNESDAY, JUNE 16, 2004

8:30 am to 11:00 am
Plenary Session 3: Experimental interventional therapeutics for Movement Disorders
Location: Salone Della Cultura, Ground Floor
Chair: Olle Lindvall
Lund, Sweden
Co-chair: John Nutt
Portland, OR, USA
Gene therapy
Jeffrey Kordower
Chicago, IL, USA
Stem cells
Ole Isacson
Belmont, MA, USA
Transplantation strategies
Patrik Brundin
Lund, Sweden
Trophic factors
Clive Svendsen
Madison, WI, USA
Clinical point of view
Olle Lindvall
Lund, Sweden
John Nutt
Portland, OR, USA

At the conclusion of this session, participants should be able to: 1. Describe the three basic mechanisms of neurorestorative therapies, namely gene therapy, neural grafting and administration of neurotrophic factors; 2. Discuss the advantages and disadvantages of stem cells relative to fetal cells for neural grafting; 3. List techniques to deliver genes and neurotropic factors to the central nervous system.

11:00 am to 11:30 am
Stanley Fahn Lecture
Molecular pathogenesis of dominantly inherited ataxias
Location: Salone Della Cultura, Ground Floor
Huda Zoghbi
Houston, TX, USA

11:30 am to 12:30 pm
Abstract Poster Session 3
Location: Poster Area, First Floor
Abstract Numbers 695-1017
Authors present odd numbers

12:30 pm to 1:30 pm
Lunch
Location: Rooftop Terrace and Various Locations

1:30 pm to 4:00 pm
Plenary Session 4: Modern concepts in the diagnosis and treatment of parkinsonism
Location: Salone Della, Cultura, Ground Floor
Chair: Anthony E. Lang
Toronto, Canada
Co-chair: Joseph Jankovic
Houston, TX, USA
Neuroprotective trials in Parkinson’s disease: design issues and prospects
Karl Kieburtz
Rochester, NY, USA
New approaches in symptomatic treatment
Olivier Rascol
Toulouse, France
Atypical parkinsonism
Andrew Lees
London, United Kingdom
New developments in neuroimaging
A. Jon Stoessl
Vancouver, Canada
Parkinsonism and dementia
David Burn
Newcastle Upon Tyne, United Kingdom

At the conclusion of this session, participants should be able to: 1. Identify the possible targets for neuroprotection in Parkinson’s disease and understand the research design issues that must be considered in evaluating putative neuroprotective and disease-modifying strategies; 2. Describe the clinical and neuropathological aspects of disorders presenting as atypical parkinsonism and dementia associated with parkinsonism and discuss the approaches available to diagnosis and management of these disorders; 3. Discuss new developments in the neuroimaging of parkinsonian disorders and new approaches to the symptomatic treatment of Parkinson’s disease.

4:00 pm to 5:00 pm
Abstract Poster Session 3
Location: Poster Area, First Floor
Abstract Numbers 695-1017
Authors present even numbers

5:00 pm to 6:30 pm
Seminar Series
Sessions featuring Italian cuisine are featured on Wednesday. Each session offers an expert’s view on Movement Disorders through a variety of topics. To encourage discussion and interaction, Seminar Series have limited registration and a ticket is required for admission.
Fee: $55 USD/ $40 USD for junior participants and allied health professionals.
S301  Clinical/epidemiology of dystonia  
Location: Meeting Room 5, First Floor  
Thomas Warner  
London, United Kingdom  
Gianni Defazio  
Bari, Italy  
At the conclusion of this session, participants should be able to: 1. Recognize and diagnose the various clinical forms of dystonia; 2. Describe the epidemiology and prevalence of dystonia; 3. Identify the genetic and environmental risk factors that lead to dystonia.

S302  Systemic and infectious diseases that cause Movement Disorders  
Location: Meeting Room 1, First Floor  
Jorge Luis Juncos  
Atlanta, GA, USA  
Francisco Cardoso  
Belo Horizonte MG, Brazil  
At the conclusion of this session, participants should be able to: 1. Describe the phenomenology of Movement Disorders associated with infectious diseases; 2. List the infectious agents that can cause Movement Disorders; 3. Discuss the management of Movement Disorders associated with infectious diseases.

S303  Drug induced Movement Disorders  
Location: Meeting Room 3, First Floor  
William Weiner  
Baltimore, MD, USA  
Daniel Tarsy  
Boston, MA, USA  
At the conclusion of this session, participants should be able to: 1. Recognize the Movement Disorders caused by antipsychotic drugs, antidepressants, stimulants, lithium and other medications; 2. Discuss the pathophysiologic basis for the antipsychotic drug-induced Movement Disorders; 3. Discuss the prevention and management of drug-induced Movement Disorders.

S304  Parkinsonism - MSA: clinical update  
Location: Meeting Room 6, First Floor  
Gregor Wenning  
Innsbruck, Austria  
Irene Litvan  
Louisville, KY, USA  
At the conclusion of this session, participants should be able to: 1. Describe typical and atypical presentations of MSA; 2. Describe appropriate investigations; 3. Describe therapeutic management.

S305  New developments in the pathology of Parkinson's disease  
Location: Meeting Room 7, Ground Floor  
Heiko Braak  
Frankfurt, Germany  
Glenda Halliday  
Randwick, Australia  
At the conclusion of this session, participants should be able to: 1. Identify the main cellular pathologies found in idiopathic Parkinson's disease, discuss their intracellular origins and determine any relationship between them; 2. Describe the new neuropathological staging scheme for idiopathic Parkinson's disease; 3. Identify the cortical, basal ganglia and thalamic regions involved in movement control, discuss their functional connectivity, identify all pathological abnormalities in the circuits in idiopathic Parkinson's disease and discuss their clinical significance.

S306  Young onset parkinsonism  
Location: Meeting Room 4, First Floor  
Anette Schrag  
London, United Kingdom  
Christoph Lücking  
Munich, Germany  
At the conclusion of this session, participants should be able to: 1. Describe to clinical and neuropathological characteristics of young onset Parkinson's disease; 2. Describe the role of genetics in Parkinson's disease (with particular reference to young onset Parkinson's disease); 3. Discuss the molecular pathophysiology of Parkinson's disease based on the genes involved.

S307  Ubiquitin proteasome system in Parkinson's disease  
Location: Meeting Room 2, First Floor  
Mark Cookson  
Bethesda, MD, USA  
Michael Sherman  
Watertown, MA, USA  
At the conclusion of this session, participants should be able to: 1. Describe the molecular components of the ubiquitin-proteasome system (UPS); 2. Explain the potential roles of molecular chaperones in mitigating the damage caused by misfolded proteins; 3. Discuss the relevance of the UPS in the molecular pathophysiology of Parkinson's disease.

S308  Botulinum toxin mechanisms and applications  
Location: Meeting Room 8, Ground Floor  
Reiner Benecke  
Rostock, Germany  
Dirk Dressler  
Rostock, Germany
7:00 pm to 9:00 pm

**Video Dinners**

Video presentations of atypical Movement Disorders engage delegates and generate clinical discussions. To ensure greater interaction, Video Dinners are limited to a maximum number of participants, and a ticket is required for admission. As the title indicates, dinner is served during the sessions.

Fee: $80 USD/ $55 USD for junior participants and allied health professionals.

**V201 Paroxysmal Movement Disorders**

Location: Meeting Room 1, First Floor
- Kailash Bhatia
  London, United Kingdom
- Kapil Sethi
  Augusta, GA, USA

At the conclusion of this session, participants should be able to: 1. Identify the key clinical features of psychogenic Movement Disorders; 2. Recognize the difference between psychogenic Movement Disorders and Movement Disorders associated with organic disease of the nervous system; 3. Define some of the underlying mechanisms of psychogenic Movement Disorders.

**V202 Psychogenic Movement Disorders**

Location: Meeting Room 2, First Floor
- Anthony E. Lang
  Toronto, Canada
- John Morris
  Sydney, Australia

At the conclusion of this session, participants should be able to: 1. Identify what are the necessary steps that have to be made for the systematic analysis of the phenomenology of a patient with an unusual Movement Disorder; 2. Identify the different types of abnormal involuntary movements that can be observed in the cases shown during the video session as the first necessary step towards the recognition of an unusual Movement Disorder. The presenters will ask the audience to carefully observe the peculiar features that distinguish one Movement Disorder from the other and subsequently reach a reasoned identification with the help of categorical descriptions. 3. Recognize a wide variety of diseases that can present with unusual Movement Disorders and frequently constitute a diagnostic challenge for the general neurologist.
THURSDAY, JUNE 17, 2004

8:30 am to 10:00 am

Seminar Series

Sessions featuring an Italian continental breakfast are featured on Thursday. Each session offers an expert’s view on Movement Disorders through a variety of topics. To encourage discussion and interaction, Seminar Series have limited registration and a ticket is required for admission.

Fee: $55 USD / $40 USD for junior participants and allied health professionals.

S401 Basic genetics in Movement Disorders
Location: Meeting Room 5, First Floor

John Hardy
Bethesda, MD, USA
Andrew Singleton
Bethesda, MD, USA

At the conclusion of this session, participants should be able to: 1. Describe the major types of molecular genetic studies aimed at identifying genes that cause Movement Disorders; 2. Identify families and populations of interest for molecular genetics studies; 3. Recognize the first steps a clinician should take to begin molecular genetic analysis of a family with an inherited Movement Disorder.

S402 Differential diagnosis and management of choreas
Location: Meeting Room 3, First Floor

Kathleen Shannon
Chicago, IL, USA
Francisco Cardoso
Belo Horizonte MG, Brazil

At the conclusion of this session, participants should be able to: 1. Recognize common and rare choreic syndromes; 2. Describe the appropriate diagnostic work-up for chorea depending on characteristics of disease presentation and history; 3. Discuss the appropriate pharmacological approaches to the treatment of choreic disease.

S403 Clinical management of dystonia
Location: Meeting Room 1, First Floor

Alberto Albanese
Milano, Italy
Marie Vidailhet
Paris, France

At the conclusion of this session, participants should be able to identify and choose the most appropriate treatment for dystonia, based on classification and on clinical features.

S404 Management of motor complications in Parkinson’s disease
Location: Meeting Room 2, First Floor

Paul Krack
Grenoble, France
Ray Watts
Birmingham, AL, USA

At the conclusion of this session, participants should be able to: 1. Describe the clinical characteristics of motor fluctuations and dyskinesias and explain their pathophysiology; 2. List all available strategies to prevent motor complications in the first place and to treat motor complications, including available oral medications, drug infusion, and surgical treatment; 3. Identify the optimal strategy in a given patient.

S405 Management of psychiatric disturbances in Parkinson’s disease
Location: Meeting Room 6, First Floor

E. Ch. Wolters
Amsterdam, Netherlands
Jorge Luis Juncos
Atlanta, GA, USA

At the conclusion of this session, participants should be able to: 1. Understand the pathophysiology of PD psychosis; 2. Understand the pharmacotherapeutic strategies in PD psychosis; 3. Understand the pharmacotherapeutic choices in PD psychosis.

S406 Mitochondrial functions in Movement Disorders: therapeutic implication
Location: Meeting Room 7, Ground Floor

Cliff Shults
San Diego, CA, USA
M. Flint Beal
New York, NY, USA

At the conclusion of this session, participants should be able to: 1. Explain the various neuroprotective properties of coenzyme Q10; 2. Describe the results of coenzyme Q10 for neuroprotection in animal studies; 3. Describe the results of clinical trials of coenzyme Q10 in neurodegenerative diseases.

S407 Targeting the basal ganglia for functional surgery
Location: Meeting Room 4, First Floor

Philip Starr
San Francisco, CA, USA
Maria Rodriguez-Oroz
Pamplona, Spain

At the conclusion of this session, participants should be able to: 1. Describe MRI-based target localization for GPI and STN; 2. Recognize electrophysiologic characteristics of the GPI and STN in Parkinson’s disease; 3. Recognize stimulation-induced adverse effects during intra-operative test stimulation through DBS leads.
Parallel Session 5: Dyskinesias in Parkinson’s disease
Location: Salone Della Cultura, Ground Floor
Chair: Stanley Fahn
New York, NY, USA
Co-chair: Peter Jenner
London, United Kingdom

Introduction and primate model
Peter Jenner
London, United Kingdom

Rodent model of dyskinesia
Angela Cenci
Lund, Sweden

Pathophysiologic basis of dyskinesia
Jonathan Brotchie
Toronto, Canada

Molecular mechanisms
Thomas Chase
Bethesda, MD, USA

Graft-related dyskinesias
C. Warren Olanow
New York, NY, USA

Pathophysiology of graft-related dyskinesias
José Obeso
Pamplona, Spain

Conclusion
Stanley Fahn
New York, NY, USA

At the conclusion of this session, participants should be able to:
1. Describe the contribution of basal ganglia and cortical plasticity to the presentation of clinical symptoms of patients with Movement Disorders;
2. To describe the possible mechanisms of tremor and the roles of different CNS regions in different types of tremor;
3. Discuss how and why it may be necessary to treat some of Movement Disorder symptoms with alternative cues for movement.

12:00 pm to 2:00 pm
Abstract Poster Sessions and Lunch
Poster Location: Poster Area, First Floor
Lunch Location: Rooftop Terrace and Various Locations
Abstract Numbers 1018-1338
Authors present odd numbers from 12:00 pm to 1:00 pm
Authors present even numbers from 1:00 pm to 2:00 pm
Parallel Session 7: Controversies

Location: Salone Della Cultura, Ground Floor

Chair: Yves Agid
Paris, France

Co-chair: Donald Calne
Vancouver, Canada

Initial therapy in Parkinson’s disease should be with a dopamine agonist: YES
Werner Poewe
Innsbruck, Austria

Initial therapy in Parkinson’s disease should be with a dopamine agonist: NO
William Weiner
Baltimore, MD, USA

Imaging endpoints reflect Parkinson’s disease progression: YES
David Brooks
London, United Kingdom

Imaging endpoints reflect Parkinson’s disease progression: NO
J. Eric Ahlskog
Rochester, MN, USA

Immunology in Movement Disorders: PANDAS and Tourette’s: YES
Gavin Giovannoni
London, United Kingdom

Immunology in Movement Disorders: PANDAS and Tourette’s: NO
Harvey Singer
Baltimore, MD, USA

Do you need Lewy bodies to diagnose Parkinson’s disease? YES
Dennis Dickson
Jacksonville, FL, USA

Do you need Lewy bodies to diagnose Parkinson’s disease? NO
Yoshikuni Mizuno
Tokyo, Japan

Can you have Parkinson’s disease with a normal F-dopa/PET or DAT/SPECT?: YES
Eldad Melamed
Petah Tiqva, Israel

Can you have Parkinson’s disease with a normal F-dopa/PET or DAT/SPECT?: NO
Kenneth Marek
New Haven, CT, USA

At the conclusion of this session, participants should be able to: 1. Discuss PET is Parkinson’s disease; 2. Explain what Lewy bodies signify in Parkinson’s disease; 3. Discuss initial treatment of Parkinson’s disease.
THE VISION

Through innovative research, strategic partnerships, and an unsurpassed commitment to disease education, Pfizer Neuroscience is dedicated to being the leading provider of neurologic and psychiatric medicines that make a meaningful difference in the lives of patients and their families around the world.
THE MOVEMENT DISORDER SOCIETY

Giovanni Abbruzzese
Genova, Italy
PRS06

Yves Agid
Paris, France
KS11, PRS07

J. Eric Ahlskog
Rochester, MN, USA
PRS07

Alberto Albanese
Milano, Italy
S403

Richard P. Allen
Arnold, MD, USA
KS05, S108

Paolo Barone
Napoli, Italy
KS02, S201

M. Flint Beal
New York, NY, USA
S406

Alim L. Benabid
Grenoble, France
PRS08

Reiner Benecke
Rostock, Germany
S308

Alfredo Berardelli
Roma, Italy
KS09, PRS06

Hagai Bergman
Jerusalem, Israel
PS02

Erwan Bezard
Bordeaux, France
PRS02

Kailash P. Bhatia
London, United Kingdom
S202, V201

Vincenzo Bonifati
Roma, Italy
S206

Heiko Brauk
Frankfurt, Germany
S305

Susan B. Bressman
Englewood, NJ, USA
V102

David J. Brooks
London, United Kingdom
KS04, PRS07

Jonathan M. Brotchie
Toronto, Canada
PRS05

Peter Brown
London, United Kingdom
PS02

Patrik Brundin
Lund, Sweden
PS03

David John Burn
Newcastle Upon Tyne, United Kingdom
PS04, S204

Paolo Calabresi
Rome, Italy
PRS06

Donald B. Calne
Vancouver, Canada
PRS07

Francisco Cardoso
Belo Horizonte MG, Brazil
S302, S402

Elena Cattaneo
Milano, Italy
PRS04

Angela M. Cenci
Lund, Sweden
PRS05

Thomas N. Chase
Bethesda, MD, USA
PRS05

Ray Chaudhuri
London, United Kingdom
KS03

Robert Chen
Toronto, Canada
S205

Cynthia L. Comella
Chicago, IL, USA
KS09, PRS01

Mark Cookson
Bethesda, MD, USA
S307

Antonio Currà
Venafro, Italy
S205

Ted M. Dawson
Baltimore, MD, USA
S208

Gianni Defazio
Bari, Italy
S301

Günther Deuschl
Kiel, Germany
KS11, PRS06

Dennis Dickson
Jacksonville, FL, USA
PRS07

Dirk W. Dressler
Rostock, Germany
S308

Bruno Dubois
Paris, France
KS07, PRS03

Roger J. Elble
Springfield, IL, USA
V103

Murat Emre
Capa Istanbul, Turkey
KS07, PRS02, PRS03

Giovanni Fabbri
Rome, Italy
S105

Stanley Fahn
New York, NY, USA
PRS05, S207

Joaquim Ferreira
Torres Vedras, Portugal
KS05

Steven Frucht
New York, NY, USA
V104

Diego Garcia Borreguero
Madrid, Spain
KS03

Oscar S. Gerhanik
Buenos Aires, Argentina
KS10, V204

Nir Giladi
Tel Aviv, Israel
V203

Gavin Giovannoni
London, United Kingdom
PRS07

Christopher G. Goetz
Chicago, IL, USA
KS02, S104, S207

Lawrence I. Golbe
New Brunswick, NJ, USA
S106

Mark Hallett
Bethesda, MD, USA
KS11, PRS04

Glenda M. Halliday
Randwick, Australia
S305

John A. Hardy
Bethesda, MD, USA
PS01, S401

Robert Hauser
Tampa, FL, USA
KS06, S202

Etienne C. Hirsch
Paris, France
KS10, PS01

Robert Iansek
Cheltenham, Australia
PRS06

Ole Isacson
Belmont, MA, USA
PRS03

Joseph Jankovic
Houston, TX, USA
KS10, KS09, PS04, V102

Peter Jenner
London, United Kingdom
KS10, PRS05

Mandar Jog
London, Canada
PRS03

Jorge Luis Juncos
Atlanta, GA, USA
S302, S405

Ryui Kaji
Tokushima City, Japan
S203

Horacio Kaufman
New York, NY, USA
S103

Karl D. Kieburtz
Rochester, NY, USA
PS04

William C. Koller
New York, NY, USA
KS1A, PRS08

Amos Korczyn
Ramat-Aviv, Israel
KS05

Jeffrey H. Kordower
Chicago, IL, USA
PS03

Paul Krack
Grenoble, France
S404

Anthony E. Lang
Toronto, Canada
KS08, PS04, V202

J. William Langston
Sunnyvale, CA, USA
PS01

Andrew J. Lees
London, United Kingdom
KS1A, KS04, PS04, V203

Richard Levy
Paris, France
PRS03

Peter A. LeWitt
Southfield, MI, USA
KS06, S202

David G. Lichter
Clarence, NY, USA
S408

Olle Lindvall
Lund, Sweden
PS03

Irene Litvan
Louisville, KY, USA
S304

Elan D. Louis
New York, NY, USA
PRS04

Andres M. Lozano
Toronto, Canada
PRS08

Christoph Lücking
Munich, Germany
S306

Key: KS = Kickoff Seminar, PS = Plenary Session, PRS = Parallel Session, S = Seminar, V = Video Dinner
FACULTY

Key: KS = Kickoff Seminar, PS = Plenary Session, PRS = Parallel Session, S = Seminar, V = Video Dinner

Kenneth Marek
New Haven, CT, USA
KS10, PRS07

I.G. McKeith
Newcastle Upon Tyne, United Kingdom
KS07, PRS03

Kevin McNaught
New York, NY, USA
PS01

Hans Michael Meinck
Heidelberg, Germany
S101

Eldad Molamed
Petah Tiqva, Israel
KS11, PRS07

Joel S. Perlmutter
St. Louis, MO, USA
PS02

Ronald Pfeiffer
Memphis, TN, USA
S103

Werner Poewe
Innsbruck, Austria
KS08, PRS07

Pierre Pollak
Grenoble, France
PRS08

Peter Paul Pramstaller
Bolzano, Italy
S106

Donald L. Price
Baltimore, MD, USA
C. David Marsden Lecturer

Serge Przedborski
New York, NY, USA
PS01

Stefan Pulst
Los Angeles, CA, USA
S102

Niall P. Quinn
London, United Kingdom
KS06, V101

Olivier Rascol
Toulouse, France
KS08, PS04

Heinz Reichmann
Dresden, Germany
KS02

Peter Riederer
Wuerzburg, Germany
PRS02

Maria Rodriguez-Oroz
Pamplona, Spain
S407

Thomas Roth
Detroit, MI, USA
KS05

John C. Rothwell
London, United Kingdom
PRS06, PS02

David Rye
Atlanta, GA, USA
S201

Terence Sanger
Stanford, CA, USA
S107

Anthony H.V. Schapira
London, United Kingdom
KS10, PRS04

Anette Schrag
London, United Kingdom
S306

Kapil D. Sethi
Augusta, GA, USA
KS05, V201

Kathleen M. Shannon
Chicago, IL, USA
S402

Jie Shen
Boston, MA, USA
S208

Michael Y. Sherman
Watertown, MA, USA
S307

Hiroshi Shibasaki
Bethesda, MD, USA
V104

Ira Shoulson
Rochester, NY, USA
KS08, PRS04

Cliff Shults
San Diego, CA, USA
S406

Harvey S. Singer
Baltimore, MD, USA
PRS07

Andrew Singleton
Bethesda, MD, USA
S401

Mark Stacy
Durham, NC, USA
KS1A

Philip Starr
San Francisco, CA, USA
S407

Matthew Stern
Philadelphia, PA, USA
KS08

Fabrizio Stocchi
Rome, Italy
KS1A, KS11

A. Jon Stoessl
Vancouver, Canada
KS04, PS04

Peter L. Strick
Pittsburgh, PA, USA
PRS03

S.H. Subramony
Jackson, MS, USA
S102

Robert A. H. Surtees
London, United Kingdom
KS07

Clive N. Svendsen
Madison, WI, USA
S307

Caroline M. Tanner
Sunnyvale, CA, USA
S206

Daniel Tarsy
Boston, MA, USA
S303

Philip D. Thompson
North Terrace, Adelaide, Australia
S101

François Tison
Pessac, France
KS05

Eduardo Tolosa
Barcelona, Spain
KS10, V101

Claudia M. Trenkwalder
Kassel, Germany
KS03, S108

Michael R. Trimble
London, United Kingdom
S408

Enza Maria Valente
Rome, Italy
PRS04

Josep Valls-Sole
Barcelona, Spain
S203

Marie Vidalhiet
Paris, France
S403

Jerrold Lee Vitek
Atlanta, GA, USA
PRS08

Jens Volkman
Kiel, Germany
PRS08

Arthur S. Walters
Edison, NJ, USA
KS03

Thomas T. Warner
London, United Kingdom
KS07

Cheryl H. Waters
New York, NY, USA
KS06, S104

Ray L. Watts
Birmingham, AL, USA
KS07, S404

William J. Weiner
Baltimore, MD, USA
KS06, PRS07, S303

Gregor K. Wenning
Innsbruck, Austria
S304

E. Ch. Wolters
Amsterdam, Netherlands
S405

Nobuo Yanagisawa
Kawasaki, Japan
S307

Anne B. Young
Boston, MA, USA
PRS04

Huda Zoghbi
Stanford, CA, USA
S403

Huda Zoghbi
Houston, TX, USA
S206

Philip D. Thompson
North Terrace, Adelaide, Australia
S101

Stanley Fahn Lecturer

Stanley Fahn Lecturer

8TH INTERNATIONAL CONGRESS OF PARKINSON’S DISEASE AND MOVEMENT DISORDERS
9th CONGRESS OF THE
EUROPEAN FEDERATION OF
NEUROLOGICAL SOCIETIES

Preliminary Scientific Programme

Main Topics
- Vascular cognitive impairment
- ALS
- Neuroprotection - neurodegeneration in MS
- The mysteries of Parkinsonism – New insights
- Headache - advances in pathophysiology and management
- Neurological disorders and sleep apnea
- Update on carotid artery disease
- Eye movements – A window to brain function
- Burden and costs of neurological diseases

Teaching Courses
- Movement disorders
- Stroke
- Epilepsy
- Dementia
- Treatment strategies in multiple sclerosis
- From headache syndromes to headache management
- From diagnosis to treatment in neuromuscular diseases
- Autonomic nervous system
- Critical care
- Neurooncology
- Neurootology - vertigo

EFNS Headoffice
University Campus
Alser Straße 4
1090 Vienna, Austria

Tel.: +43 1 889 05 03
Fax: +43 1 889 05 03 12
E-mail: headoffice@efns.org

www.efns.org/efns2005
COMMITTEE & TASK FORCE MEETINGS

MONDAY, JUNE 14
7:00 am to 8:30 am
Awards Committee
Location: Meeting Room 5, First Floor

Education Committee
Location: Meeting Room 3, First Floor

Financial Affairs Committee
Location: Meeting Room 6, First Floor

Journal Oversight Committee
Location: Meeting Room 4, First Floor

7:00 am to 8:30 am
Awards Committee
Location: Meeting Room 5, First Floor

Education Committee
Location: Meeting Room 3, First Floor

Financial Affairs Committee
Location: Meeting Room 6, First Floor

Journal Oversight Committee
Location: Meeting Room 4, First Floor

12:30 pm to 1:30 pm
International Congress Oversight Committee
Location: Officers/IEC Workroom, Ground Floor

4:30 pm to 7:30 pm
Task Force on PD Dementia
Location: Officers/IEC Workroom, Ground Floor

6:00 pm to 7:30 pm
Membership Committee
Location: Lounge 1, Ground Floor

TUESDAY, JUNE 15, 2004
7:00 am to 8:30 am
Continuing Medical Education (CME) Committee
Location: Meeting Room 3, First Floor

Industrial Relations Committee
Location: Meeting Room 4, First Floor

Liaison/Public Relations Committee
Location: Meeting Room 6, First Floor

WEDNESDAY, JUNE 16
7:00 am to 8:30 am
Bylaws Committee
Location: Meeting Room 6, First Floor

Neurosurgery Section Task Force
Location: Meeting Room 2, First Floor

UPDRS Revision Task Force Steering Committee / Task Force for the Development of Rating Scales for PD
Location: Meeting Room 5, First Floor

7:30 am to 8:30 am
Scientific Issues Committee
Location: Meeting Room 4, First Floor

12:00 pm to 1:30 pm
EBMR Task Force
Location: Meeting Room 6, First Floor

Task Force on Epidemiology
Location: Meeting Room 5, First Floor

Young Members
Location: Meeting Room 1, First Floor

MDS ANNUAL BUSINESS MEETING

Tuesday, June 15
10:30 am to 11:30 am
Salone Della Cultura, Ground Floor
EXHIBITION

General information and Exhibit Hall Hours
Please allow adequate time in your daily schedule to visit the Exhibit Hall, located in the Palazzo dei Congressi. The exhibition is an integral component of your International Congress experience, offering you the opportunity to speak with representatives of companies that provide services or market products directly related to Movement Disorders. Delegates may enter the Exhibit Hall during the following hours:

Monday, June 14 8:00 am to 5:00 pm
Tuesday, June 15 8:00 am to 5:00 pm
Wednesday, June 16 8:00 am to 5:00 pm
Thursday, June 17 8:00 am to 5:00 pm

Exhibitor Registration
Exhibitors may register at the Exhibitor Registration Desk, located in the Palazzo dei Congressi during the following hours:

Saturday, June 12 3:00 pm to 8:30 pm
Sunday, June 13 6:30 am to 6:00 pm
Monday, June 14 6:30 am to 6:00 pm
Tuesday, June 15 6:30 am to 6:00 pm
Wednesday, June 16 6:30 am to 6:00 pm
Thursday, June 17 6:30 am to 6:00 pm

Exhibitor Badge Policy
Exhibit booth personnel must show an official MDS exhibitor name badge in order to gain access to the Exhibit Hall during installation, show, or dismantlement hours. Badges should be worn at all times as security guards will monitor Exhibit Hall entrances for proper identification. Exhibitors will be identified as follows:

Exhibitor Badge (Yellow) - Allows admittance to the exhibit hall area only.
Exhibitor Delegate Badge (Orange) - Allows the delegate to enter the exhibit hall as an exhibitor and attend scientific sessions including poster presentations (access to Wine and Cheese Seminars and Video Dinners at an additional cost).

Endorsement Disclaimer
Products and services displayed in the Exhibit Hall or advertised in the program occur by contractual business arrangements between the MDS and participating companies and organizations. These arrangements do not constitute nor imply an endorsement by the MDS of these products and services.
Cambridge Laboratories
Deltic House
King Fisher Way
Silverlink Business Park
Wallsend, Tyne & Wear NE28 9NX
United Kingdom
Phone: +44 191 296 9307
Fax: +44 191 296 9368
Web site: www.cambridge-labs.com
Booth Number: 147
Cambridge Laboratories is a highly successful and progressive healthcare company. Our products provide benefit in various therapeutic areas, including CNS, one of these products is Xenazine 25. Indicated for a wide range of organic hyperkinetic movement disorders, Xenazine 25 is also the only licensed treatment in the UK for Tardive Dyskinesia.

Dystonia Medical Research Foundation
One East Wacker Dr. #2430
Chicago, IL 60601
USA
Phone: +1 (312) 755-0198
Fax: +1 (312) 803-0138
Web site: www.dystonia-foundation.org
Booth Number: 113
The Dystonia Medical Research Foundation is mandated to advance research for more effective treatments and ultimately a cure; to promote awareness and education; and to support the needs and well-being of affected individuals and families.

Elsevier
Molenwerf 1
Amsterdam, 1014 AG
Netherlands
Phone: +31 320 485 3104
Fax: +31 320 485 3809
Web site: www.elsevier.com
Booth Number: 253

European Dystonia Federation
69 East King Street
Helensburgh, G84 7RE
United Kingdom
Phone: +44 1436 678799
Fax: +44 1436 678799
Web site: www.dystonia-europe.org
Booth Number: 212
Alliance of 19 national dystonia patient support organizations in Europe.

European Federation of Neurological Societies
Alser Strasse 4
Vienna, 10900
Austria
Phone: +43 1 889 0503
Fax: +43 1 889 050313
Web site: www.efns.org
Booth Number: 235
The aim of the European Federation of Neurological Societies is to advance the development of the neurological sciences in Europe. 38 European national neurological associations are registered members of the EFNS. The EFNS welcomes individual members from all over the world. For more information visit www.efns.org.
Ipsen
190 Bath Rd.
Slough Berkshire SL1 3XE
England
Phone: +44 1753 627701
Fax: +44 1753 627611
Web site: www.ipsen.com
Booth Number: 144

Present in over 110 countries, with a total staff of nearly 3,700, the Ipsen Group had a turnover of $718 million in 2002, 27.1% outside of Western Europe. The Group develops products in targeted therapeutic fields, in particular, oncology and endocrinology, which represent its priority development centres. Currently, Ipsen has over 20 products on the market. These are distributed between medicines commercialised for specialists who are involved in the targeted therapeutic fields, as well as medicines commercialised for other therapeutic fields, linked to the history of the Group. In 2002, 18.2% of Ipsen’s turnover was reinvested in Research and Development, carried out from four centres: Paris, Boston, Barcelona and London, through an international network of about 550 scientists.

John Wiley & Sons, Ltd.
The Atrium, Southern Gate
Chichester, West Sussex
PO19 8SQ, UK
Phone: +44 1243 779777
Fax: +44 1243 775878
Web site: www.wileyeurope.com
Booth Number: 250

Founded in 1807, John Wiley & Sons, Inc. is an independent, global publisher of print and electronic products. Wiley specializes in scientific and technical books, journals, textbooks and education materials for colleges and universities, as well as professional and consumer books and subscription services. Wiley’s Internet site can be accessed at www.wiley.com.

Kyowa Hakko Kogyo Co., Ltd.
1-6-1 Ohtemachi, Chiyoda-ku
Tokyo 100-8185
Phone: JPN: +81 3 3282 0007/U.S.: +1 (609) 919-1100/
UK: +44 1753 566000
Fax: +81 3 3284 1968
Web site: www.kyowa.co.jp/eng/index.htm
Booth Number: 138

Kyowa Hakko Kogyo Co., Ltd. (KHK) is one of Japan’s foremost biotechnology companies, KHK and its subsidiaries, Kyowa Pharmaceutical, Inc. and Kyowa Hakko U.K. Ltd., are pursuing international human trials for 6 NCE drug candidates. KW-6002, an adenosine A2a receptor antagonist, has completed Phase IIB development for Parkinson’s disease.

Medtronic Neurological
710 Medtronic Parkway NE
Minneapolis, MN 55432-5604
USA
Phone: +1 (763) 505-5000
Fax: +1 (763) 505-1000
Web site: www.medtronic.com
Booth Number: 129

Medtronic Neurological’s Activa® Therapy is a reversible and adjustable treatment for some of the most disabling symptoms of Parkinson’s disease, Essential Tremor and dystonia. It uses an implanted neurostimulation system, akin to a pacemaker, to relieve symptoms when medication alone fails to provide adequate benefit or consistently causes intolerable side effects.

National Spasmodic Torticollis Association
9920 Halbert Ave.
Fountain Valley, CA 92708
USA
Phone: +1 (714) 378-7837
Fax: +1 (714) 378-7830
Web site: www.torticollis.org
Booth Number: 110

The National Spasmodic Torticollis Association is a non-profit organization dedicated to providing information and support to ST patients, educating the public and the medical community about ST, advocating for the rights of those with ST and promoting research on ST.

Novartis Pharma AG
Lachstr. 35
CH-4002 Basel
Switzerland
Phone: +41 61 324 1111
Fax: +41 61 324 6652
Web site: www.novartis.com

Orion Corporation Orion Pharma
Orionintie 1
FIN-02200 Espoo
Finland
Phone: +358 10 429 4701
Fax: +358 10 429 3815
Booth Number: 200

Novartis AG is a world leader in pharmaceuticals and consumer health, headquartered in Basel, Switzerland. Novartis has been a leader in the Neuroscience area for more than 50 years, having pioneered early important treatments for Alzheimer’s disease (EXELON®) and Parkinson’s disease (STALEVO®, COMTAN®).

Orion Pharma, the pharmaceutical division of the Orion Group, is the leading Finnish healthcare company and originator and manufacturer of entacapone. This active pharmaceutical ingredient is used as COMTESS®/COMTAN® and also as one of the three active substances in a new combination product for Parkinson disease (PD), marketed as STALEVO®.

Please feel invited to visit the combined exhibition of Novartis Neuroscience Franchise and Orion Pharma.

For further information please visit the companies’ Web sites.
www.novartis.com
www.orionpharma.com
Pfizer
235 E. 42nd St.
New York, NY 10017
USA
Phone: +1 (212) 733-6993
Fax: +1 (212) 808-8833
Web site: www.pfizer.com
Booth Number: 100
Pfizer Inc. discovers, develops, manufactures and markets leading prescription medicines for humans and animals, and many of the world’s best known consumer brands. Through innovative research, strategic partnerships and an unsurpassed commitment to disease education, Pfizer Neuroscience is dedicated to being the leading provider of neurological and psychiatric medicines that make a meaningful difference in the lives of patients and their families around the world.

Restless Legs Syndrome Foundation
819 Second Street SW
Rochester, MN 55902
USA
Phone: +1 (507) 287-6465
Fax: +1 (507) 287-6312
Web site: www.rls.org
Booth Number: 247
The Restless Legs Syndrome Foundation is a non-profit organization dedicated to increasing universal awareness, developing effective treatments, and finding a definitive cure for restless legs syndrome (RLS). The organization provides information about RLS, develops local support groups, publishes a quarterly newsletter, and funds research for the study of RLS.

Schwarz Pharma AG
Alfred-Nobel-Strasse 10
Monheim, 40789
Germany
Phone: +49 2173 48-0
Fax: +49 2173 48-1608
Web site: www.schwarzpharma-cns.com
Booth Number: 220
SCHWARZ PHARMA is a multi-national pharmaceutical company developing and marketing innovative products for specialty markets. SCHWARZ PHARMA, with its reputation for excellence in cardiology, is developing innovative products for neurological and urological diseases. Within neurology, our therapeutic focus includes Parkinson’s disease, restless legs syndrome, epilepsy and neuropathic pain.

Scisens GmbH
Juliusstr. 10
Frankfurt am Main 60487
Germany
Phone: +49 69 97 09 76 88
Fax: +49 69 77 24 72
Web site: www.scisens.de
Booth Number: 226
The business of Scisens is to develop and manufacture products and procedures in order to make new scientific knowledge gained from medical research and sports training available to people in their everyday life.

Valeant Pharmaceutical International
3300 Hyland Ave.
Costa Mesa, CA 92626
USA
Phone: +1 (714) 545-0100
Fax: +1 (714) 556-0131
Web site: www.valeant.com
Booth Number: 244
Valeant Pharmaceuticals International is a global, publicly traded specialty pharmaceutical company that discovers, develops, manufactures and markets a broad range of pharmaceutical products in three therapeutic areas, neurology, infectious disease and dermatology.

Wisepress Online Bookshop, Ltd.
The Old Lamp Works
25 High Path
Merton Abbey, London SW19 2JL
United Kingdom
Phone: +44 208 715 1812
Fax: +44 208 715 1722
Web site: www.wisepress.co.uk
Booth Number: 238
Wisepress Online Bookshop is pleased to present a display of publications chosen especially for the MDS International Congress from the world’s leading publishing houses. All the books on display can be ordered directly at the stand or via our Web site. We can also order you free sample copies of the journals on display and take subscription orders. Whatever your book requirements, Wisepress will be happy to help—whether you are an author seeking a publisher or having difficulty obtaining a title, our professional staff will assist you.

16th International Congress on Parkinson’s Disease and Related Disorders
Paulsbornerstr. 44
Berlin, 14193
Germany
Phone: +49 30 300 6690
Web site: www.parkinson-berlin.de
Booth Number: 229
The 16th International Congress on Parkinson’s Disease and related Disorders will be held in Berlin from 5th to 9th of June, 2005. The theme “Present and Future Perspectives of Parkinson’s Syndrome” lends a certain futurological perspective to this Congress, but also includes the retrospective viewpoint. We will discuss the possibilities and limitations of the classification, etiopathogenesis and therapy of Parkinson’s disease in the present and in the future.
FLOOR PLAN & MEETING SPACE

FIRST FLOOR
Optimizing levodopa delivery

Enhance the benefits of levodopa therapy

- Provide increased “on” time and decreased “off” time
- Demonstrate rapid and significant improvement in activities of daily living and motor function
- Sustain benefits over the long term
- Provide more consistent and reliable delivery of levodopa to the brain

STALEVO tablets are indicated to treat patients with idiopathic Parkinson’s disease: 1. To substitute (with equivalent strength of each of the 3 components) for immediate-release carbidopa/levodopa and entacapone previously administered as individual products. 2. To replace immediate-release carbidopa/levodopa therapy (without entacapone) when patients experience the signs and symptoms of end-of-dose “wearing off” (only for patients taking a total daily dose of levodopa of 800 mg or less and not experiencing dyskinesia). STALEVO is contraindicated for use concomitantly with nonselective monoamine oxidase (MAO) inhibitors, with selegiline at doses >10 mg/day in patients with narrow-angle glaucoma, and in patients with suspicious, undiagnosed skin lesions or a history of melanoma. Because STALEVO contains entacapone, it should not be used concurrently with COMTAN™ (entacapone). The most common side effects of STALEVO therapy are dopaminergic in nature (e.g., dyskinesia, nausea). These side effects may be manageable with alteration in the drug-dosing schedule, e.g., extending the dosing interval, reducing the number of doses per day, or changing to a STALEVO strength containing less levodopa. However, rapid withdrawal or abrupt reduction of STALEVO therapy should be avoided. Other common side effects include diarrhea, hyperkinesia, urinary incontinence, hyperprolactinemia, abdominal pain, dizziness, constipation, fatigue, pain, and hallucinations. Other less frequent side effects can include other mental disturbances, orthostatic hypotension, rhabdomyolysis, severe dizziness, dark saliva, and symptoms resembling neuroleptic malignant syndrome. Drugs metabolized by the COMT enzymes (e.g., isoproterenol, epinephrine) should be used with caution in patients receiving STALEVO. STALEVO should be used with caution in patients with severe cardiovascular or pulmonary disease, bronchial asthma, renal, hepatic, or endocrine disease, and in patients with a history of myocardial infarction or peptic ulcer.
**STALEVO provides dosing convenience in a single tablet**

### Three dosage strengths – each with a 1:4 ratio of carbidopa to levodopa

<table>
<thead>
<tr>
<th>Dose</th>
<th>Carbidopa</th>
<th>Levodopa</th>
<th>Entacapone</th>
</tr>
</thead>
<tbody>
<tr>
<td>STALEVO 50</td>
<td>12.5 mg</td>
<td>50 mg</td>
<td>200 mg</td>
</tr>
<tr>
<td>STALEVO 100</td>
<td>25.0 mg</td>
<td>100 mg</td>
<td>200 mg</td>
</tr>
<tr>
<td>STALEVO 150</td>
<td>37.5 mg</td>
<td>150 mg</td>
<td>200 mg</td>
</tr>
</tbody>
</table>

- Individual tablets should not be fractionated
- Only 1 STALEVO tablet should be administered at each dosing interval
- Except for COMTAN® (entacapone), standard drugs for PD may be used concomitantly with STALEVO (dose adjustments for those drugs may be required)

---

**References:**
Dogs were shown to interfere with bilateral efferent, glossoptosis, and intussuscepta before lumbar puncture (P = 0.0001). Therefore, dogs were placed on a diet of raw meat and vegetables before surgery. The results suggested that dogs are more likely to develop intussusception when they are fed a diet high in saturated fat and low in fiber. In addition, the dogs were more likely to develop intussusception if they were given a oral x-ray dye containing barium sulfate before surgery. This dye can cause the stomach to contract and release barium sulfate into the bloodstream, which can cause the intestines to become twisted and cause intussusception. Therefore, dogs should not be given this dye before surgery if they are at risk for developing intussusception.

A randomized, controlled trial was conducted to compare the effectiveness of two different treatments for dogs with intussusception. One group of dogs received a standard treatment of surgery and anesthesia, while the other group received a new treatment of endoscopic intussusception reduction. The results showed that the endoscopic treatment was more effective than the standard treatment in reducing the incidence of intussusception. However, the endoscopic treatment was associated with a higher risk of complications, such as perforation and gastrointestinal bleeding. Therefore, the standard treatment may be a better option for dogs with intussusception who are at high risk for complications.
MONDAY, JUNE 14

Poster Viewing: 8:30 am to 5:00 pm
Authors Present Odd Numbers: 12:00 pm to 1:00 pm
Authors Present Even Numbers: 4:00 pm to 5:00 pm

Ataxia

Poster numbers 1-28

P1 Serum and cerebrospinal fluid levels of copper, iron and zinc in patients with type SCA-2 Ataxia from the province of Holguin in Cuba
J. Garcia, R. Delgado, L. Velazquez, C. Gonzalez, G. Sanchez, A. Gonzalez-Quevedo

P2 Neuroepidemiological and clinical characterization of the Cuban hereditary ataxias
G. Sanchez, L. Velazquez, M. Velazquez, L. Almaguer, Y. Almira, K. Batillan

P3 Neuropathological markers and their relationship with clinical and molecular parameters in the Cuban Spinocerebellar Ataxia Type 2
L.C. Velazquez, G. Sanchez, J.C. Garcia, N. Canales, L. Almaguer, E. Martinez

P4 β-CIT and IBZM SPECT reveals a MSA-C like pattern of nigro-striatal dopaminergic impairment in spinocerebellar ataxia type 2
S.M. Boesch, E. Donnemiller, K. Seppi, G.K. Wenning, W. Poewe

P5 Fragile X premutation alleles in patients with sporadic cerebellar ataxia
Y. Zhao, K. Puong, H. Law, M. Wong, I. Ng, E. Tan

P6 Neuropathology of Machado-Joseph disease, over three generation
K. Hasegawa, S. Yagishita, H. Mitomi

P7 Cervical dystonia in spinocerebellar ataxia type 2
K. Zarubova, E. Ruzicka, R. Mazanec, A. Zurnova, M. Bojar

P8 Proton magnetic resonance spectroscopy and volumetry of the cerebellum in SCA2 and MSA-C
S.M. Boesch, M. Schocke, C. Wolf, S. Felber, W. Poewe, G.K. Wenning

P9 Ocular motility in fragile X premutation carriers and Fragile X associated tremor/ataxia syndrome (FXTAS)
D.A. Hall, V.S. Pelak, R.J. Hagerman, P.J. Hagerman, M.A. Leehey

P10 Late presentation of ataxia telangiectasia (AT)
T. Jawad, R.L. Stallings, T. Lynch

P11 Molecular and clinical correlation in 15 Indian pedigrees of spinocerebellar ataxia 12

P12 A new saccin mutation in a Spanish family
C. Criscuolo, F. Saccà, G. Combarros, J. Infante, A. Filla, J. Berclano

P13 Spinocerebellar ataxia type 10: Description of 8 families with different phenotype

P14 Kinesiological findings in primary progressive freezing gait
V. Castillo, S. Catalano, Y. Blanco, C. Pot, F. Asal, P. Burkhard

P15 Reliability and validity in ataxia scales
A. De Rosa, V. Scarano, E. Salvatore, A. de Falco, G. Coppola, A. Filla

P16 Consistent affection of the thalamus in spinocerebellar ataxia type 2

P17 Sleep disturbance in SCA2
S.M. Boesch, E. Brandt, M. Krauscher, G.K. Wenning, B. Hoegl, W. Poewe

P18 Cerebrotendinous xanthomatosis masquerading as Friedrich's ataxia
S.S. Wu, L. Hiele, S.J. Frucht

P19 Clinical analyses of 50 families of early-onset autosomal recessive spinocerebellar ataxias in the Japanese population
M. Tada, K. Hara, O. Omodera, H. Date, S. Tsuji, M. Nishizawa

P20 Clinical features of 49 pathologically proven multiple system atrophy in the Japanese population

P21 Motor cortex excitability in cerebellar ataxia. Clinical-neurophysiological correlations
S. Tamburin, G. Zanette, S. Marani, A. Andreoli, P. Manganetti, A. Riaschi

P22 A new classification of spinocerebellar ataxia type 3 (Machado-Joseph disease)
H.A. Teive, W.O. Arruda, L.C. Werneck

P23 Genotype-phenotype correlation in 100 families with spinocerebellar ataxias

P24 Spinocerebellar ataxia type 10: A comparison between Brazilian and Mexican families

P25 MJD/SCA3: Identification of novel smallest allele

P26 Frequency of SCA1, SCA2, SCA3, SCA6, SCA7, SCA8, SCA12, SCA17, DRPLA and FRDA mutation in patients with hereditary and sporadic cerebellar ataxia in Serbia

P27 A new cytcheimical test for analysis of mitochondrial dysfunction in Friedreich ataxia
M.V. Eshova, S.N. Illarioshkin, V.S. Sukhorukov, I.A. Ivanova-Smolenskaya

P28 Autosomal dominant spinocerebellar ataxias in Russia: The spectrum of genetic forms, DNA-testing and management of affected families
S.A. Klyushnikov, S.N. Illarioshkin, E.D. Markova, I.A. Ivanova-Smolenskaya, T.N. Proskokova

Basic Science

Poster numbers 29-90

P29 Exploring the potential role of PRK1/PKN in pathophysiology of Parkinson's disease
W. Duan, Y. Zhu

P30 Gene expression analysis in 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine mice model of Parkinson disease using cDNA microarray

P31 Endogenous dopamine release by repetitive transcranial magnetic stimulation over the primary motor cortex in anesthetized macaque monkeys
T. Ohnishi, T. Hayashi, S. Okabe, H. Matsuda, H. Iida, Y. Ugawa

P32 Dopamine receptor hypersensitivity correlates with a drug-induced dyskinesia (DID) rodent model: A functional magnetic resonance imaging study at 7 Tesla
M.A. Delfino, R. Kalisch, C. Larramendy, G.M. Murer, O.S. Gershnik, D.P. Auer

P33 Neuroleukin, a potential antigenic target in paediatric Opsoclonus/Myoclonus syndrome (OMS)
P.M. Candler, R.C. Dale, A.J. Church, G. Giovannoni, J.H. Rees, E.J. Thompson

P34 Gene expression profiling of Lewy body-bearing neurons in Parkinson's disease
L. Lu, F. Neff, W.H. Oertel, J. Schlegel, A. Hartmann

P35 Regional vulnerability of mesencephalic dopaminergic neurons in Parkinson's disease: A human postmortem gene expression profiling study

P36 Experimental basis for the putative role of GluR6/kainate glutamate receptor subunit in Huntington's disease natural history

P37 Involvement of macroautophagy in the dissolution of neuronal inclusions
H.J. Rideout, I.C. Lang-Rollin, L. Stefanis

P38 Effects of selective proteasomal inhibitors on ventral midbrain cultures
P39 A novel mouse model of multiple system atrophy
N. Stefanova, P.J. Kahle, M. Reinid, F. Tison, W. Poewe, G.K. Wenning
P40 Inactivation of Apaf-1 blocks polyglutamine pathogenesis: Implications for Huntington's disease
P41 Ablanter cellular behavior of mutant torsinA implicates nuclear envelope dysfunction in DYT1 dystonia
P. Gonzalez-Alegre, H.L. Paulson
P42 Phosphorylation of α-synuclein induces its aggregation
M. Mouradian, E. Junn, M. Tanaka, Y.-M. Kim
P43 Caspase-11 is a key mediator of dopaminergic neuron loss in a mouse model of Parkinson's disease
T. Furuya, H. Mochizuki, K. Yoshimi, H. Hayakawa, M. Miura, Y. Mizuno
P44 Pramipexole protects dopaminergic neurons against various forms of oxidative stress relevant for Parkinson's disease
G. Gille, G. Xu, B. Doreen, M. Yonglian, R. Wolf-Dieter, R. Heinz
P45 Glycolytic enzymes on neuronal membranes are candidate autoantigens in post-streptococcal neuropsychiatric disorders
R.C. Dale, P.M. Candler, A.J. Church, R. Walt, J.M. Pocock, G. Giovannoni
P46 Theta burst conditioning of the human cortex with rTMS
P47 Antioxidant properties of levodopa
G. Pozzoli, A.M. Marczewska, M. Barichella, N. Mucci, G. Sacliotto, B. Cestaro
P48 The effects of altered sensory afferent input by muscle vibration and exercise on movement performance accuracy in patients with Complex Regional Pain Syndrome (type I)
P49 SUMO-1 in neural inclusions of neurodegenerative diseases
D.L. Pountney, M.J. Raftery, P.C. Blumbergs, W. Gai
P50 Single photon emission computerised tomography in primate models of Parkinson's disease
P51 Sensory-motor organisation in the hand area of the human motor cortex is remodelled by patterned proprioceptive stimulation and attention
K. Rosenkranz, J.C. Rothwell
P52 Gial activity and convergence of pathological pathways in Lewy Body parkinsonism
P53 Roles of iron in the intracellular aggregation of α-Synuclein
M.M. Kobayashi, T. Hasegawa, A. Kikuchi, A. Takeda, Y. Itoyama
P54 Lesion of the pedunculopontine nucleus induces hyperactivity of subthalamic nucleus and substantia nigra pars reticulata in rats
S. Breit, L. Selen, A. Martín, J.B. Schulz
P55 Dystonia-associated mutation (DelGAG) in DYT1 disrupts TorsinA intersubunit interaction
P.T. Pham, W. Woo, Y. Nguyen, K.P. Frei, D.D. Truong
P56 Effects of estrogen on Parkin, UCH-L1, and uncoupling proteins, UCP2, -4, and -5 on MPP+-induced apoptosis in human neuroblastoma
P.W. Ho, D.Y. Chan, K. Leung, M.H. Kung, D.B. Ramsden, S.-L. Ho
P57 Oxidized catecholamine metabolites by tyrosinase overexpression induces apoptotic cell death in SH-SY5Y neuroblastoma cells
T. Hasegawa, M.M. Kobayashi, A. Takeda, A. Kikuchi, K. Furukawa, Y. Itoyama
P58 Subthalamic nuclear metabolic activity changes in straito-nigral degeneration-non-human primate models: A cytochrome oxidase histochemistry study
P59 Motor learning in Parkinson’s disease and Huntington disease: Improvement of performance in a new motor skill after brief training
P60 Expression profiling of the parkinsonian substantia nigra using microarrays
P61 Correlation between the severity of bradykinesia and the ability to learn a new motor skill in patients with Parkinson disease
P62 A diffuse neurodegenerative change in mice brain induced by chronic rotenein administration
P63 Opioids protect against substantia nigra dopaminergic cell apoptosis induced by iron deprivation: A possible model for the pathogenesis of the restless legs syndrome
Y.-M.J. Sun, T. Hoang-Le, J.A. Neubauer, A.S. Walters
P64 Accumulation of alamine in striatum of a rotenone rat model of Parkinson’s disease
M.K. Pasha, H.K. Miyashita, A.H. Rajput
P65 Immunolocalization of tyrosine hydroxylase and norepinephrine transporter in axons in mouse heart
T. Amino, T. Kanazawa, S. Shimazu, T. Uchihara, S. Orino, M. Mizusawa
P66 Circadian motor behaviour of the rat after chronic treatment with a selective D3 and a D2/D3 antagonist
P.C. Baier, R. Koch, D.J. Verley, C. Trenkwalder
P67 L-deprenyl (selegeline) neuroprotective failure in a manganese neurotoxicity model
A. Fernandes, J.G. Ferreira, E. de Oliveira, S. Ponzoni
P68 Reversal of high-frequency repetitive transcranial magnetic stimulation induced facilitation by inverse monophasic stimulation in humans
T. Tings, N. Lang, F. Tergau, W. Paulus, M. Sommer
P69 Rotational behavior response to intra striatal manganese microinjection
J.G. Ferreira, A. Fernandes, E. de Oliveira, S. Ponzoni
P70 Dopaminergic neurons of knock-in mice with hypersensitive α4 nicotinic receptors are protected by mecamylamine
S. Orb, C. Labarca, H.A. Lester, J. Schwarz
P71 Enhanced expression of LS4 mutant α4 nACHr in adult mice increases the loss of midbrain dopaminergic neurons
P72 Kainic acid lesioning of the subthalamic nucleus: Neuroprotective effects on nigral degeneration in MPTP treated primates
P73 Comparison of the potency of botulinum toxin type A on human extensor digitorum brevis muscle paralysis with regards to refrigerator storage time: A randomized double blind controlled study
M.Y. Park, K.Y. Ahn
P74 Changes in expression of glutamate transporters in the basal ganglia of the six-hydroxydopamine-lesioned rats: A rat model of Parkinson’s disease
E.K. Chung, K.K. Yung
P75 Increase in expression of cannabinoid receptor one in the basal ganglia of six-hydroxydopamine-lesioned rats: A rat model of Parkinson’s disease
W. Lau, K.K. Yung
P76 Dopamine transporter-mediated cytotoxicity of β-carbolinium derivatives related to Parkinson’s disease: Relationship to transporter-dependent uptake
A. Sterch, Y.-I. Hwang, J. Schwarz
P77 Inducible overexpression of tyrosine hydroxylase and dopamine production in cellular model
A. Takeda, M. Kobayashi, T. Hasegawa, A. Kikuchi, Y. Itoyama
P78 Involvement of benzodiazepine receptors in neuroinflammatory and neurodegenerative diseases: Evidence from activated microglial cells in vitro
H. Wilms, J. Claesen, C. Roeth, J. Sievers, G. Deuschl, R. Luccis
P91 Intracellular signaling pathways in dopaminergic specification of mesencephalic neural stem cells induced by interleukin-1
M. Sabolek, M. Heinrich, S. Liebau, J. Schwarz, A. Storch

P92 Characterization of neuronal activity in and around the Subthalamic Nucleus

P93 Parkinson’s disease-associated mutant synphilin-1 mediates proinflammatory inhibition and interacts with regulatory proinflammatory protein S6
F.P. Marx, D. Berg, S. Dawson, O. Riess, J.B. Schultz, R. Krueger

P84 Reduction in endogenous parkin levels renders CNS cells sensitive to both caspase-dependent and caspase-independent cell death
M.M. Muqit, L.P. MacCormac, D.J. Faulkes, N.W. Wood, D.S. Latchman

P85 A method for combined motor performance assessment and neurotransmitter measurement in rats
F. Bergquist, D. Andersson, H. Nissbrandt

P86 Worst motor recovery of MPTP + 3-NP-striatonigral degeneration (SND) mice treated by high dose of levodopa
E. Diguie, A. Adam, P.-O. Fernagut, F. Tison

P87 MPTP + 3-nitropropionic acid (3NP)-induced striatonigral degeneration (SND) in mice: A long term behavioral study
E. Diguie, P.-O. Fernagut, L. Centelles, F. Tison

P90 Mitochondrial complex I inhibition damages dopaminergic neurons via caspase-dependent and caspase-independent cell death
M.M. Muqit, L.P. MacCormac, D.J. Faulkes, N.W. Wood, D.S. Latchman

P99 Evidence for coexistence of both hyperkinesia and hypokinesia in Huntington’s disease (HD): A biomechanical study of gait

P100 Pallidial neurons firing rates are similar in Huntington’s and Parkinson’s disease patients
J. Tang, E. Moro, A.M. Lozano, A.E. Lang, W.D. Hutchinson, J.O. Dostrovsky

P101 Functional genetics in Huntington’s disease: Phenotype and genotype correlation as assessed by CAG repeat length and objective neurophysiological measures
R. Reilmann, S. Bohlen, F. Kirsten, H. Lange, T. Merli, D. Auer

P102 Chorea in a patient with celiac disease and TPN-induced manganese deposition in the basal ganglia
I. Subramanian, J. Bronstein

P103 High dose creatine therapy for Huntington’s disease: Clinical and 31P phosphorous magnetic resonance spectroscopy (31P MRS) findings in a two year study
S.J. Tabrizi, A.M. Blamire, B. Rajagopalan, D. Manners, A.H. Schapira, T.T. Warner

P104 Paroxysmal ballism in dipygotic twins: An unusual form of PNKD
Y.M. Bordelon, L. Leary, S. Frucht

P105 Juvenile onset Huntington’s disease: Like mother, like son?

P106 Insulin resistance and decreased insulin secretion capacity simultaneously present in normoglycemic patients with Huntington’s disease
V.S. Kostic, N.M. Lalic, M. Svetc, A. Jotic, J. Maric

P107 The UFMG Sydenham’s Chorea Rating Scale (USCRS): Reliability and consistency
A.L. Teixeira, D.P. Maia, F. Cardoso

P108 Caudate nucleus abnormalities on MRI in rheumatic chorea
C.S. Sarkhila, B.S. Singhal

P109 Symptomatic hemichorea following an isolated lesion in the subcortical white matter
T. Baumer, C. Weiller, A. Munchau

P110 Trace of diffusion tensor reveals caudate pathology in patients with Huntington’s disease (HD)
K.J. Mair, K. Seppi, M.F. Schocke, W. Jaschke, W. Poewe, G.K. Wenning

P111 Chorea gravidarum: Another condition associated with Sydenham’s chorea and anti-basal ganglia antibodies
A.J. Church, F. Cardoso, R.C. Dale, E.J. Thompson, A.J. Lees, G. Giovannoni

P112 Choreaohathetosis, an unusual presentation of serotonin syndrome
D.A. Hodnett, D.J. Renganathan, D.P. Fitzgerald, D.A. Galvin

P113 Paroxysmal kinesigenic choreathetosis related to diabetes mellitus: Follow-up of two cases
M. Coletti Moja, E. Milano, S. Gasperde, M. Gianelli, M. Iulicocci, L. Durelli

P114 Hemiballism–hemichorea: A transcranial magnetic stimulation study
C. Civardi, R. Vicentini, C. Varrasi, M. Cecchin, C. Boccelli, R. Cantello

P115 Hemiballism–hemichorea responding to topiramate: Clinical and neurophysiological findings
C. Civardi, R. Vicentini, M. Cecchin, R. Cantello

P116 Hypothalamic neuropathology in the R6/2 transgenic mouse model of Huntington disease causes narcolepsy: Relevance to human disease
P. Petersen, J. Gil, P. Mofayel, H. Tanila, I. Araujo, P. Brundin

P117 Comparative analysis of phenotypes in parkin-positive and parkin-negative patients with juvenile parkinsonism
E.D. Markova, T.B. Zagarovskaya, I.A. Ivanova-Smolenskaya, S.N. Illarishkin, P.A. Lominsky

P118 A case of recurrent hemiballism associated with the parietal lobe dysfunction
T.-B. Ahn, S.-S. Yoon, D.-I. Chang, K.-C. Chung
P119 The efficacy and tolerability of amantadine for treatment of choreic dyskinesias in patients with Huntington’s disease  
M. Kapsiyzi, J. Kuja

P120 Impaired motor skill learning in Huntington’s disease  
P. Mazzone, R. Ravindran, J.W. Krakauer, C.B. Meekowitz, K. Marder

Clinical Electrophysiology  
Poster number 121-163

P121 Levetiracetam suppresses long-loop reflexes at the cortical level  
M. Kofler

P122 Transcallosal inhibition: A useful tool in the differential diagnosis of parkinsonian syndromes?  
C. Trompetto, M. Bove, R. Marchese, L. Marinelli, L. Avanzino, G. Abbruzzese

P123 Dopamine agonists prolong the latency of the p300 event-related potential in patients with Parkinson’s disease  
H.A. Shill, A. Green

P124 Is Obsessive Compulsive Disorder (OCD) a sensorimotor integration dysfunction? Evidence from a gaiting study in a SEP paradigm  
S. Rossi, S. Bartalini, M. Ulivelli, A. Mantovani, P. Castrogiovanni, S. Passero

P125 Cognitive and movement related potentials in the basal ganglia  
I. Rektor, M. Bares, M. Brazdil, P. Kanovsky, D. Sochurkova, I. Rektorova

P126 Intraoperative monitoring the motor symptoms using surface EMG during electrode implantation for deep brain stimulation of movement disorders  
X. Liu, P. Bain, T. Aszt, J. Stein

P127 Effects of single and repetitive transcranial magnetic stimulation delivered during the reaction time on sequential rapid arm movements in normal subjects  
B. Gregori, A. Curra, L. Dinapoli, N. Accornero, A. Berardelli

P128 An unusual case of hemimasticatory spasm  

P129 Silent period in sensory dystonia or pseudoathetosis  
N. Brany, M. Kabiraj, B. Yaqub, S. Al Deeb

P130 Origin of the thalamic high frequency components of somatosensory evoked potentials  
R. Hanajma, A.M. Lozano, R. Chen

P131 Polysomnographic findings in neuroacanthocytosis patients  
L. Dolenc Grojec, J. Ghorayeb, J. Kobal, T. Pollmacher, F. Tison

P132 Post-movement beta synchronization is reduced in Parkinson’s disease and delayed in essential tremor  
G. Tamas, A. Magyar, L. Palvolgyi, A. Takats, I. Szirmai, A. Kamondi

P133 Pathogenesis of mirror movements in Parkinson’s disease  
J.-Y. Li, A.J. Espay, C. Gunnar, A.E. Lang, R. Chen

P134 Electrophysiological testing in psychogenic tremor: Does it always help?  
S.W. Hung, G.F. Molnar, P. Ashby, R. Chen, V. Voon, A.E. Lang

P135 Pseudoathetosis – a phenomenon with different pathophysiology  
T. Bäumer, U. Hidding, A. Münchau

P136 Observing Parkinson’s tremor by non invasive electromyography  
G. Filligoi, F. Felici, N. Accornero, M. Traballesi, P. Sbriccoli, I. Bazzucchi

P137 DBS/STN-related changes of the EEG and visual evoked potentials in Parkinson’s disease  

P138 Mechanisms underlying motor overflow with intended unimanual movements in Parkinson’s disease (PD): A transcranial magnetic stimulation (TMS) study  
M. Cincotta, A. Bergheresi, F. Balestrieri, A. Ragazzoni, P. Vanni, F. Benvenuti

P139 Changes of cortical excitability in children with attention deficiency hyperactivity disorder (ADHD)  
A. Wolters, F. Haessler, R. Benecke, E. Kunesch, J. Buchmann

P140 Reciprocal interaction between different intracortical inhibitory mechanisms  
S.Y. Kang, Y.H. Sohn

P141 Subthreshold 5 Hz rTMS over the premotor cortex in Parkinson’s disease  
P. Mir, K. Matsunaga, F. Gillio, N. Quinn, H. Siebner, J. Rothwell

P142 Dysfunction of gastric myoelectrical activities in idiopathic Parkinson’s disease  

P143 Median nerve somatosensory evoked potentials from palilidal and thalamic electrodes in patients with dystonia  
J.C. Wohrle, C. Blihak, R. Weigel, E. Griss, M.G. Hennerici, J.K. Krauss

P144 Surface EMG and MMG for diagnosis of motor system disease by means of artificial neural networks  
B. Gregori, F. Bombelli, G. Scappini, N. Accornero

P145 Synaptic potentiation: A study with 5 Hz-repetitive transcranial magnetic stimulation  
F. Gillio, A. Conte, V. Frasca, C. Lorenzano, A. Berardelli, M. Inghilleri

P146 Hemifacial spasm: Dempographic and electrophysiological data summary of 206 patients  
M. Kiziltan, R.S. Ciftçi, N. Uzun, F.K. Savrun

P147 Prolonged 5-Hz rTMS of the motor cortex improves bradykinesia in the contraleseral hand without changing the amplitude of the contingent negative variation in Parkinson’s disease  
I. Holler, H.R. Siebner, R. Cunnington, W. Gerschlagert

P148 Repetitive transcranial magnetic stimulation (rTMS) for levodopa induced dyskinesias in Parkinson disease – preliminary results  
S.R. Filipovic, P. Heywood, J.C. Rothwell, K.F. Bhattacharyya

P149 Does retinopathy in dementia with Lewy bodies contribute to hallucinations?  
M. Ter, D. Devos, C. Maurage, S. Defoort-Delhezeme, A. Destée, L. Defebvre

P150 Effects of pergolide on gait initiation in parkinsonian patients  
U. Dillmann, G. Fuss, C. Krick, J. Spiegel

P151 Callosal function in cerebral microangiopathy tested by TMS, MRI morphometry and bilateral motor performance  
M. Wittstock, A. Grossmann, L. Krieghoff, R. Benecke, E. Kunesch, A. Wolters

P152 Usefulness of transcranial magnetic stimulation in differentiation between progressive supranuclear palsy and Parkinson’s disease  
Y. Morita, Y. Osaki, Y. Doh

P153 Event-related desynchronization prior to psychogenic jerks  
Z. Mari, S. Matteson, M. Hallett

P154 Transcranial magnetic stimulation of the motor cortex influences the activity of subthalamic neurons in patients with Parkinson’s disease  
A.P. Strafella, T. Paus, V. Vanderwerf, A.F. Sadikot

P155 Movement-related cortical potentials in essential tremor  
M.-K. Lu, C.-H. Tsai, F.-C. Chang, Y.-W. Yang, C.-C. Kuo, C.-C. Lee

P156 Nicotine corrects impaired motor-motor and afferent sensory inhibition in patients with Gilles de la Tourette syndrome  
M. Orth, B. Amann, M.M. Robertson, J.C. Rothwell

P157 Paraneoplastic encephalomyelitis with muscular rigidity. Electrophysiological study  
A. Traba, A. Esteban, J. Prieto, C. Martin, J. Fernandez

P158 An electrophysiological study to demonstrate in vivo differences between two types of botulinum toxin type A (BOTOX® and DysportTM)  
J.A. Smuts, K. de Boulle, R. van Coller, P.W. Barnard

P159 Motor cortex excitability studied with repetitive transcranial magnetic stimulation in patients with Huntington’s disease and levodopa-induced dyskinesias  
C. Lorenzano, L. Dinapoli, A. Curra, M. Inghilleri, G. Fabbri, A. Berardelli
Drug-induced Movement Disorders
Poster number 164-176

P164 Incidence of tardive dyskinesia with typical versus atypical antipsychotics in very high risk patients
Z.S. Advan

P165 Severe motor worsening and accelerated tardive dyskinesia with aripiprazole in Lewy Body Dementia
S.E. Hirsch, L.S. Boylan

P166 Effect of levodopa dose on dyskinesia in advanced Parkinson’s disease with on-off fluctuations
N. Keijzers, M. Horstink, S. Gieling, L. Verhagen

P167 Fluoxetine-induced oral-buccal-lingual dyskinesia and persistent mandibular dystonia treated with botulinum toxin type-A
J.J. Chen, D.M. Swape

P168 Aripiprazole on a patient with resistant tardive dyskinesia
G. Fabiani, A. Astete, F. Follador

P169 Tetrabenazine: Effective treatment for tardive dyskinesia
J. Jankovic, C.B. Hunter, N. Mejia, K. Vuong

P170 Parkinsonian syndrome following MDMA (Ecstasy) addiction
G. Fabrizi, S. Monaco, A. Dalla Libera

P171 Pyridoxine in the management of severe tardive dyskinesia: A double blind, placebo controlled and cross over study
P. Venegas, M.E. Millan, M. Miranda, M. Sinning

P172 Preliminary characterization of a possible experimental rodent model of levodopa-induced abnormal involuntary movements
M.R. Gluck, L.A. Santana, M.D. Yahr

P173 Autosomal dominant, neuroleptic-induced reversible, dystonia and parkinsonism
N.L. Khan, M. Bhatt, N. Khan, D.J. Brooks, P. Piccini, K.P. Bhatta

P174 Clonazepam responsive tardive vocal tics - Report of three cases
I. Schlesinger

P175 Drug-induced parkinsonism in the elderly: A community-based survey in Brazil
M.T. Barbosa, F. Cardoso, P. Caramelli, D.P. Maia, M.C. Cunningham, M.F. Lima e Costa

P176 Pisa syndrome (truncal dystonia) due to clozapine in a patient with Parkinson’s disease
J. Miravite, M. Tagliati

Dystonia
Poster number 177-312

P177 Electric field and potential distribution generated by deep brain stimulation of the globus pallidus internus
S. Hemm, N. Vaysiire, L. Cif, A. Gannau, G. Mennessier, P. Coubes

P178 Unusual prolonged duration of improvement following treatment with botulinum toxin A for hemifacial spasm and blepharospasm
S. Badarny, S. Zvi, S. Honigman

P179 Posttraumatic cervical or shoulder-elevation dystonia progressing to generalized dystonia
K.A. Josephs, S.M. Torgninson, J.Y. Matsumoto, E.J. Ahlskog

P180 Segmental dystonia after childhood encephalitis with apraxia of eyelid opening: Video report and literature review
E.C. Lim, M.-H. Tan

P181 Palilal activity in a monkey model of dystonia and parkinsonism
J.W. Mink, S. Moerlein, J.S.Perlmutter

P182 Dystonia and choreoathetosis after glutaric aciduria type I
E. Bidabadi

P183 The syndrome of fixed dystonia - An evaluation of 105 patients
A.E. Schrag, M.R. Trimbile, N.P. Quin, K. Bhatia

P184 Abnormal sensorimotor interactions in dystonia secondary to lesions in the somatosensory system
S. Tamburin, A. Fiaschi, P. Manganotti, G. Zanette

P185 Segmental dystonia associated with pontomesencephalic lesions
T.J. Loher, J.K. Krauss

P186 Deep brain stimulation for dystonia: Outcome at long-term follow-up (3 years or longer)

P187 The disorder of cortical excitability and cortical inhibition in focal dystonia is normalised following successful botulinum toxin treatment: An evidence from somatosensory evoked potentials and transcranial magnetic stimulation recordings
P. Kanovsky, M. Bares, H. Streitlova, H. Klapiova, P. Daniel, I. Rektor

P188 Dramatic improvement of paroxysmal choreoathetosis with acetazolamide
V. Michel, A. Lagueny, D. Guehl, B. Bioujac, P. Burbaud

P189 Istralehal baclofen for generalized dystonia in reflex sympathetic dystrophy: A case report
F. Bono, A. Lavana, M. Aloisi, C. Giliiberto, M.R. Lupo, C. Mastrandrea

P190 Phenotypic unpredictability of DYT1 mutation carriers in Serbia
M.V. Svetel, N. Ivanovic, N.T. Dragasevic, J. Jovic, V.S. Kostic

P191 Cervical dystonia in dentatorubral-pallidoluysian atrophy

P192 Is motor training a therapeutic option for writer’s cramp?
K.E. Zeuner, H.A. Shill, Y.H. Sohn, F.M. Molloy, B.C. Thornton, M. Hallett

P193 Stereotactical MRI demonstrates grey nuclei lesions in DYT1 dystonic patients
N. Vaysiire, P. Delort, L. Cif, N. Patau, B. Vlaud, P. Coubes

P194 Cognitive functions in dystonia
M. Balas, R.B. Scott, N. Giladi

P195 Writing and motor sequence learning in Writers’ Cram
M. Balas, N. Giladi, L. Gruendlinger, A. Karmi

P196 Decreases in adenosine A1 receptor binding in an animal model of paroxysmal dyskinesia
A. Richter, K. Barlow, R. Raymond, M. Hamann, J.N. Nobrega

P197 Familial dystonic syndrome with sea blue histiocytes
M.H. Bhatt, S.R. Vaidya, A. Hegde

P198 Botulinum toxin injections for an unusual case of writer’s dystonia

P199 Investigating the effect of DYT1 dystonia mutation on torsinA function
R.E. Goodchild, J. Roseman, J. Aron, W.T. Dauer

P200 Multifocal dystonias: A critical appraisal

P201 Deep brain stimulation in myoclonus-dystonia syndrome (MDS)
L. Cif, E. Valente, N. Vaysiire, S. Hemm, S. Serrat, P. Coubes

P202 Observations on the use of botulinum toxin type B (BoNT-B), in patients previously treated with type A (BoNT-A)
D.G. Rogers
P203 Deep brain stimulation in movement disorders due to post anoxic Cerebral Palsy
L. Cif, H. El Fertit, N. Voyssiere, S. Hemm, S. Serrat, P. Coubes

P204 Dys tonic rubral tremor secondary to midbrain hemorrhage N. Biary, W. Khoeja, M. Soft, B. Yaqub

P205 Hemidystonia - Hemiatrophia syndrome N. Biary, E. Baikish, M. Soft, K. Al Moutaery

P206 Patterns of nuchal muscle overactivity in cervical dystonia as determined by EMG of multiple muscle pairs preceding and subsequent to botulinum toxin therapy: Does the pattern change? D.D. Duane, G.E. Heimburger

P207 Paroxysmal hemidystonia as the presenting manifestation of multiple sclerosis in three patients E. Riva-Amarante, J.C. Martínez-Castroillo, J. Masjuan, J.C. Alvarez-Cermeno

P208 Efficacy and safety of a new botulinum toxin type A free of complexing proteins in treatment of blepharospasm P. Roggenkämper

P209 A Korean family with clinically variable dopa-responsive dystonia caused by mutation in intron 3 of GTP cyclohydrolase 1 gene S. Chung, J.-H. Im, S. Ahn, C.-S. Ki, J.-W. Kim, M. Lee


P211 Reaching movements in childhood dystonia: Consistent errors or random noise? T.D. Sanger

P212 Classification conundrums in paroxysmal dyskinesias: A new subtype or variations on classic themes? M.H. Pourtar, R. Guerrini, S.J. Frucht

P213 Neuroacanthocytosis presenting as dystonic tremor A. Cifelli, G. Sawle, N. Bajaj

P214 Transgenic mouse model of childhood onset dystonia P. Shashidhanan, R.H. Walker, K.S. McNaught, M.F. Brin, C.W. Olanow


P216 Cortical activation in reflex sympathetic dystrophy (RSD) dystonia studied by functional MRI E.W. Gieteling, M.A. van Rijn, B.M. de Jong, J.J. van Hilten, K.L. Leenders

P217 Presence of head tremor reduces the effectiveness of the botulinum toxin injections for cervical dystonia – a patients’ perspective S.R. Filipovic, M. Jahanstahi, R. Viswanathan, P. Heywood, D. Rogers, K.P. Bhatia

P218 Botulinum toxin restores reciprocal inhibition of H reflex in forearm muscles in patients with spasmodic torticollis W. Kim, G. Kim, H. Kim, M. Lee


P221 GM1 type 3 gangliosidosis: Report of four cases and review of the literature E. Roze, E. Paschke, T. Eck, N. Lopez, A. Maurel Ollivier, D. Doummar

P222 Kinematic analysis of a reach-grasp-drink task in children with primary dystonia and age-matched controls M.E. Jenkins, J.W. Mink

P223 Impaired motor output control in patients with focal dystonia of writers cramp S. Bohlen, I. Decius, C. Konrad, J. Vollmer-Haase, R. Reilmann

P224 A clinical and genetic study of an Italian family with early onset dystonia-parkinsonism G. Fabbrini, F. Brancati, L. Vacca, E. Valente, A. Nemeth, A. Berardelli

P225 Spontaneous pallidal discharge in 15 cases of dystonia: Comparison with Parkinson’s disease and normal Macaque P.A. Starr, W.J. Marks, G. Rau, N. Lindsey, D. Simmons, R.S. Turner

P226 Alternative therapy use in patients with cervical dystonia K.A. Sawabini, M.L. Evatt

P227 Torsin-mediated neuroprotection against 6-OHDA toxicity in C. elegans G.A. Caldwell, C. Songsson, C.C. Gelwix, K.A. Caldwell


P229 Abnormality in motor cortex excitability in peripherally induced dystonia: A case report S. Bohilhalter, F. Leon-Sarmiento, M. Halliett

P230 Movement disorder quantification of dystonic syndromes A. Legros, A. Beuter

P231 Patient satisfaction and course of disease in cervical dystonia with long-term botulinum toxin A treatment I. Skoszeid, E. Kerty


P233 Blepharospasm and apraxia of eyelid opening in parkinsonism W. Yoon, S. Lee, E. Jeong, W. Lee

P234 Age at onset as a factor in determining the phenotype of primary torsion dystonia S. O’Riordan, D. Raymond, T. Lynch, R. Saunders-Pullman, S.B. Bressman, L. Daly

P235 Roperation for generalized dystonia: 40 years after successful thalamic surgery H. Toda, C. Hamani, E. Moro, Y.-Y. Poon, A.E. Lang, A.M. Lozano

P236 Disturbance of associative motor cortical plasticity in focal hand dystonia D. Weise, A. Schramm, K. Stefan, A. Wolters, K. Reiners, M. Naumann

P237 Retrospective evaluation of the dose of Dysport® and BOTOX® in the clinical management of cervical dystonia or blepharospasm (The REAL DOSE Study)—a comparison of dose ratio distribution based on drug start L. Findley, A. Marchetti, R. Magar, F. Ahmed, J. Larsen, Z. Pirtosek


P239 Successful treatment of eversion foot dystonia secondary to peripheral trauma S.A. Hannan

P240 Rate of improvement following deep brain stimulation for generalized dystonia and spasmodic torticollis R.G. Bittar, T.Z. Aziz, J. Yianni, J. Stein, S. Wang, X. Liu


P242 Botulinum toxin treatment for writer’s cramp: Double-blind, randomized, placebo-controlled trial do the benefits outweigh the disadvantages? J.J. Kruitik, J.H. Koelman, B.W. Ongerbroer de Visser, J.D. Speedman

P243 Botulinum Toxin B for patients with oromandibular dystonia resistant to Botulinum Toxin A: Report of 4 cases S. Catania, C. Cordivari, P. Misra, A. Lees
P244 Extracting superimposed rhythmic and tonic EMG activity in patients with dystonia using adaptive wavelet shrinkage
S. Wang, X. Lu, J. Yanni, T. Aziz, J.F. Stein

P245 Evaluation of the epsilon-sarcoglycan (SGCE) promoter region in myoclonus-dystonia (M-D)
R. Schuele, S. Tezenas de Montcel, A. Brice, O. Bandmann, T. Gasser, F. Amsud

P246 Fatigue in primary adult-onset dystonia
G. Masi, G. Defazio, S. Lambert, V. Lucchese, P. Lambert, P. Livrea

P247 Primary blepharospasm and dry eye: An age-dependent association

P248 Clinical genetics of primary blepharospasm
M.S. Aniello, D. Martino, G. Masi, E.M. Valente, A. Berardelli, G. Defazio

P249 Short latency afferent inhibition in patients with writer’s cramp

P250 Gene expression studies in a novel rat dystonia model
D. Alvarez-Fischer, M. Grundmann, L. Lu, C. Moller, W.H. Oertel, O. Bandmann

P251 Diffusion tensor imaging in primary cervical dystonia
C. Colosimo, V. Calistri, P. Pantano, G. Falderini, A. Berardelli

P252 Long-term efficacy of botulinum toxin A in the treatment of blepharospasm over a 10-year period
L. Silveira-Moriyama, L.R. Gonçalves, A. Maria-Santos, H.F. Chien, E.R. Barrosa

P253 The inheritance of abnormal vibration induced illusion of movement in dystonia
N. Frima, R.A. Grünwald

P254 MPTP-induced dopamine denervation causes transient dystonia in several primate species
S.D. Tabbal, J.W. Mink, J.S. Perlmutter

P255 Headache in cranial and cervical dystonia
P. Bartangi, G. Fabbri, C. Paullotti, G. Defazio, G. Cuccu, A. Berardelli

P256 Paroxysmal dystonia in acute transverse myelitis
S.J. Kim, B.G. Yoo, E.K. Kim

P257 Lack of interference of repetitive transcranial magnetic stimulation over the posterior parietal cortex with sensory trick maneuver in torticollis patients
A. Schramm, M. Naumann, K. Reiners, J. Classen

P258 Blink reflex R2 inhibition following palilal deep brain stimulation for dystonia
S. Tisch, P. Linoussin, J. Rothwell, P. Asselmann, K. Bhatia, M. Hariz

P259 Onset and progression of primary torsion dystonia in sporadic and familial Italian cases
A.E. Elia, A. Bentivoglio, G. Filippini, A. Fasano, T. Ialongo, A. Albanese

P260 Clinical features of DYT1 and non-DYT1 early onset primary torsion dystonia (PTD) in Italy
A.E. Elia, N. Nardocci, A. Bentivoglio, A. Fasano, A. Albanese

P261 Blink rate in the diagnosis of blepharospasm
A. Bentivoglio, P.A. Tonali, A. Albanese, A. Fasano

P262 Shortened cortical silent period in both dystonic and non-dystonic cervical muscles of patients with cervical dystonia: A transcranial magnetic stimulation study
B. Donmez, R. Cakmur, F. Uzunel

P263 Praying-induced oromandibular dystonia
T.V. Ilic, M. Pötter, I. Holler, G. Deuschl, J. Volkmann

P264 Long term outcome of chronic GPI stimulation in dystonia: 15 cases
K. Boetzke, B. Berezniai, J.H. Mehrkens, U. Steude

P265 Presynaptic dopamine transporter in patients with idiopathic focal dystonia compared to Parkinson’s disease: A [(123)I]-FP-CIT-SPECT study
N. Tambascio, F. Fabiani, F. Corea, A. Faricelli, A. Rossi, A. Bocca

P266 Subthreshold low-frequency repetitive transcranial magnetic stimulation over the premotor cortex modulates upper limb dystonia
N. Murase, R. Kaji, T. Mima, N. Murayama, H. Shibasaki, J.C. Rothwell

P267 fMRI correlates of bilateral mirror writing movements (mirror dystonia) in a writer’s cramp patient
M. Merello, S. Carpintiero, E. Fridman, F. Meli, A. Cammarota, R. Leiguarda

P268 Botulinum toxin-A and muscle afferent block in X-linked Dystonia-Parkinsonism of Panay
R.L. Rossales, M.S. Delgado, M.V. Malicdan

P269 GPI stimulation in primary generalized dystonia: A H[14]O study
O. Denteante, L. Vercueil, S. Thobois, E. Broussolle, N. Costes, F. Lavenne

P270 Pretarsal blepharospasm: Clinical and electrophysiological characteristics
F. Grandas, L. Lopez-Manzanares, A. Traba, A. Esteban

P271 Abnormal regional cortical activation in contralateral primary motor cortex in patients with writers cramps exclusively during a writing-task
D. Ruge, K.R. Kessler, U. Ziemann

P272 Botulinum toxin type B de novo therapy of cervical dystonia: Frequency of antibody-induced therapy failure
D. Dressler, R. Bigalke

P273 Detecting neutralising antibodies against botulinum toxin type B with a mouse diaphragm assay
D. Dressler, M. Lange, R. Bigalke

P274 New formulation of BOTOX: Complete antibody-induced therapy failure in hemifacial spasms
D. Dressler

P275 Characteristics of sensory trick manoeuvres in idiopathic oromandibular yaw opening dystonia
A. Schramm, J. Classen, K. Reiners, M. Naumann

P276 Validation of the Beth Israel dystonia screen (BIDS) for diagnosis of dystonia

P277 Is childhood secondary dystonia a sensory disorder: Children with arm dystonia and cerebral palsy have a deficit of tactile sensory discrimination
S. Kukke, T.D. Sanger

P278 Mirror-movements in writer’s cramp - A multi-channel EMG study
R. Borthain, V. Ramaraju, S.N. Pandit, M.A. Kanikannan, S. Mohandas

P279 Afferent effects of botulinum toxin type A: Evidence from the tonic vibration reflex in upper limb dystonia
C. Trompetto, A. Currà, A. Buccolieri, A. Suppa, G. Abbuzzese, A. Berardelli

P280 Long-term potentiation of the blink reflex in patients with blepharospasm
A. Quartarone, A. Sant’Angelo, F. Morgante, E. Aiello, H.R. Siebner, P. Girlanda

P281 Motor imagery impairment in writer’s cramp patients
V. Rizzo, A. Quartarone, S. Bagnato, D. Crupi, A. Berardelli, P. Girlanda

P282 Painful spasms can be reduced by low-frequency repetitive TMS of the premotor cortex in generalised secondary dystonia

P283 Differences in the disordered sensorimotor organisation of the hand in musician’s dystonia and writer’s cramp: Clue for different pathophysiology?
K. Rosenkranz, A. Williams, K. Butler, C. Cordwai, A. Lees, J.C. Rothwell

P284 Homocysteine and serum markers of immune activation in dystonia

P285 Paroxysmal hemidystonia with contralateral spreading and rostro-caudal progression in a patient with Devic’s disease
F. Fattapposta, M. Bartolo, A. Perrotta, M. Serrota, F. Pauri, L. Parisi

P286 The cognitive profile of primary dystonia: Preliminary findings of a prospective study
J. Mueller, L. Bartha, W. Eiser, G.K. Wenning, T. Benke, W. Poewe
POSTER SESSION 1

P287 Deep brain stimulation on the cervico-axial dystonia, long-term results
D. Gaudin, L. Clif, P. Coulbs, G. Bouvier
P288 Survey of sensory and motor tricks
S. Kanchana, H. Shill, M. Wong, M. Hallett
P289 Antibasal ganglia antibodies in atypical dystonia and tics: A prospective study
P290 Genetic heterogeneity in rapid-onset dystonia-parkinsonism: Description of a new family
P291 Efficacy and safety of a new botulinum toxin type A free of complexing proteins in treatment of cervical dystonia
B. Renecke
P292 Two-year follow-up of botulinum toxin B treatment in type A resistant primary dystonia
T.M. Entner, J. Mueller, G.K. Wenning, W. Poewe
P293 Psychogenic dystonia: Clinical characteristics and long term progression
M. Thomas, K.D. Vuong, J. Jankovic
P294 Integrated approach to cervical dystonia with botulinum toxin and neumorotor rehabilitation
C. Tassorelli, F. Mancini, G. Sandrini, R. Zangaglia, G. Nappi, C. Pacchetti
P295 Neuropathology in DYT1/torsina-linked dystonia
C.W. Olanoan, K.S. McNaught
P296 Segmental dystonia responsive to amiodarone
K.P. Frei, M. Pathak, D.D. Tranoung
P297 Cervical dystonia associated with droopy shoulder syndrome
J.-S. Liu, M.-Y. Lan, C.-C. Chang, C.-S. Su, H.-W. Su, Y.-Y. Chang
P298 Bilateral pallidotomy for generalized dystonia: A Cuban experience
C. Maragotto, G. Rodriguez, G. Lopez, R. Melo, L. Alvarez
P299 Psychogenic facial spasm (The Smirk)
D. Tarsy, A. Schrag, N. Quinn, K. Bhatia
P300 Clinical presentation of familial and sporadic primary dystonia in a cohort of adult patients
H. Shang, N. Clerc, D. Lang, J.-M. Burgunder, A. Kaelin-Lang
P301 Dystonia as a presentation of anti-Hu paraneoplastic syndrome
G.D. O’Connor, P. Hodnett, D. Schmidt, B. Sweeney
P302 Acquired paroxysmal tics and bilateralstephalorism following bilateral cerebellar infarction
K. Rourke, M. Hutchinson
P303 Generalized dystonia associated with Lipoid Proteinosis (Urbach-Wiethe disease): A case report
P304 Status dystonicus: Report of four cases
P305 The age of onset in cervical dystonia is independent of level of education
J.P. O’Dwyer, M. Hutchinson
P306 Clinical and genetic variability in myoclonus-dystonia syndrome
P307 Unilateral paliloddytomy for primary hemidystonia
A. Alkhani, S. Bohlega
P308 Brain activation patterns during motor tasks in patients with epsilon-sarcoglycan mutation positive myoclonus-dystonia
A.B. Deutschlander, T. Stephan, M. Naumann, T. Gasser, T. Brandt, F. Asmus
P309 Hallervorden-Spatz Syndrome in Thailand
K. Phanthumchinda, Y. Likijjaroen
P310 Sensory thresholds using grating orientation tasks at the fingertip in cervical dystonia
D. Weise, A. Schramm, K. Stefan, A. Wolters, K. Reiners, M. Naumann
P311 Disturbance of associative motor cortical plasticity in focal hand dystonia
J.P. O’Dwyer, M. Hutchinson
P312 Transcutaneous electrical nerve stimulation (TENS): A new therapeutic approach for writer’s cramp dystonia

Gene Therapies and Cell-Based Therapies
Poster numbers 313-322

P313 Dopaminergic protection and regeneration by neuritin-expressing c17.2 neural stem cells in rat model of Parkinson’s disease
S. Chen, W. Liu, G. Lu, B. Li
P314 Restoring reinnervation of the dopaminergic system induced by GDNF in an experimental model reproducing a presymptomatic phase of Parkinson’s disease
C. Carcenac, M. Brizard, J. Mallet, M. Savasta
P315 Switching cell fate with human Neuro-D1
J. Sanchez-Ramos, S. Kamath, P. Waiczak, N. Chen, R. Heller, T. Zigova
P316 Transplantation of dopamine neurons derived from primate embryonic stem cells
R. Sanchez Pernaute, L. Studer, D. Ferrari, A. Perrier, A. Ferree, O. Isacson
P317 Ectopic expression of α-synuclein promotes neuronal differentiation of murine neural stem cells (NSC)
M. Jungnitsch, A. Storch, J. Schwarz
P318 Electrophysiological characterization of human fetal mesencephalic progenitor cells and derived neurons
P319 Human neural precursor cells reverse functional deficits in 6-OHDA lesioned rats
S.C. Schwarz, W. Jan, V. Dirk, E. Susanne, S. Alexander, S. Johannes
P320 Proliferation and differentiation of murine neural stem cells: Effect of oxygen in vitro
J. Milosevic, M. Poppe, S.C. Schwarz, A. Storch, J. Schwarz
P321 Reversal of L-DOPA-induced dyskinesia and motor impairments by AAV vector-mediated gene transfer of TH and GTPCH1 in a rat model of Parkinson’s disease
C. Winkler, T. Carlsiss, N. Muzyczka, R. Dengler, A. Bjorklund, D. Kirik
P322 Functional effects of GDNF gene therapy on motor performance in parkinsonian rats with intrastriatal dopaminergic transplants
C. Winkler, B. Georgievska, T. Carlsiss, R. Dengler, A. Bjorklund, D. Kirik

Myoclonus
Poster numbers 323-333

P323 Proprioception myoclonus (PSM): A motor phenomenon found in restless legs syndrome (RLS) and different from Periodic Limb Movements during Sleep (PLMS)
P324 EEG-EMG and EMG-EEG frequency analysis in Dutch patients with ‘familial cortical myoclonus or tremor with epilepsy’
A.-F. van Rootselaar, N.M. Maurits, J.H. Koelman, K.L. Leenders, P. Brown, M.A. Tijsen
P325 ‘Familial cortical myoclonus or tremor with epilepsy’ and cerebellar pathology
A.-F. van Rootselaar, E. Aronica, E.N. Jansen Steur, J.M. Rozemuller-Kwakkel, R.A. de Vos, M.A. Tijsen
P326 Trunk tremor as part of the myoclonus-dystonia phenotype in a large Dutch family
E.M. Foncke, C. Klein, M. Gerritz, K. Hedrich, C.C. Tijsen, M.A. Tijsen
P327 Analysis of fragmentary myoclonus in sleep: Frequency, distribution in sleep stages and association with sleep disorders
A.B. Kunz, B. Hoeogl, W. Poewe
P328 A case of Guillain-Barre syndrome with peripheral myoclonus and syndrome of painful legs and moving toes
M. Bozi, K. Filippopolitis, I. Hatzigeorgiou, M. Tzortzi, A. Georgali

P329 Myoclonus in cortico-basal degeneration: Is it of cortical origin?
Z. Mari, M. Matsushashi, H. Shibasaki, M. Haitz

P330 ‘Familial cortical myoclonus or tremor with epilepsy’: A review on the clinical, genetic and electrophysiological aspects
A.-F. van Rootselaar, I.N. van Schaik, P.M. Callenbach, A.M. van den Maagdenberg, J.H. Koelman, M.A. Tijssen

P331 Diaphragmatic myoclonus successfully treated with botulinum toxin
P. Simal, J.C. Martinez-Castrillo, F. Vivancos

P332 Myoclonus associated with long-standing poliomyelitis is due to central reorganization
C. Cordivari, N.J. Toms, S. Catania, V.P. Misra, A.J. Lees, P. Brown

P333 Action myoclonus - Renal failure syndrome: a further case report
L. Vadlamudi, F.L. Ierino, S.F. Berkovic, A.J. Hughes

Spasticity
Poster number 334-343

P334 Two year randomised, double blind, parallel group, placebo controlled, multi-injection cycle trial of treatment with botulinum toxin A for leg spasticity in cerebral palsy
A.P. Moore, R.A. Ade-Hall, C. Tudor-Smith, L.R. Rosenbloom, J. Walsh, K. Mohamed

P335 Short-term electrical stimulation enhances the effectiveness of botulinum toxin in spasticity
E. Frasson, B. Ruzzante, G. Didonè, M. Bottanelli, A. Priori, L. Bertolasi

P336 A way to improve the effectiveness of botulinum toxin in spinal cord injury patients
W.A. Raza, N. Green, H. Francis

P337 Perception of emotional prosody in Parkinson’s disease
C. Schroeder, S. Martin, F. Szymanski, W. Nager, T.F. Muente, R. Dengler

P338 Intrathecal baclofen pump therapy improves functional motor control and quality of life in spastic hemiplegia after stroke
R. Izor, S. Fisher, R. Simpson, K. Johnson, T. Tran, M. Schiess

P339 Ocular myasthenia following botulinum toxin type A injection for limb spasticity
M. Umaiorubahan, V.C. Uthamarayan

P340 Treatment of spasticity with botulinum toxin: A ten-years follow-up study
M. Bottanelli, S. Vicentini, G. Rossato, E. Fincati, N. Rizzuto, L. Bertolasi

P341 The synthetic cannabinoid Nabilone® reduces spasticity-associated pain: A double-blind placebo-controlled cross-over trial
J. Wissel, T. Entner, J. Mueller, C. Brenneis, T. Berger, W. Poewe

P342 A double-blind, randomised, placebo-controlled study to evaluate efficacy and safety of botulinum toxin type b (myobloc/neurobloc) and botulinum toxin type A (dysport) for the treatment of spastic paraparesis
F. Mancini, A. Moglia, M. Allena, G. Sandrini, G. Nappi, C. Pacchetti

P343 Cocontractions related to obstetrical brachial plexus palsy treated with botulinum toxin
Initiate MIRAPEX now for long-term benefits

Delays the need for levodopa
At 4 years, there is a 41% probability that patients initiated with MIRAPEX are still on monotherapy.1,2

Delays onset of motor complications
After 4 years, 48% of patients initiated on MIRAPEX alone were free of any major motor complication vs 26% of patients initiated on levodopa.3

Free of any major motor complication at 4 years

<table>
<thead>
<tr>
<th>% of Patients</th>
<th>MIRAPEX (n=151)</th>
<th>Levodopa (n=150)</th>
</tr>
</thead>
<tbody>
<tr>
<td>90%</td>
<td>48%</td>
<td>26%</td>
</tr>
</tbody>
</table>

*The probability is based on a survival analysis of a 48-month maintenance dose, open-label, long-term safety study using the life-table method for 225 patients with early PD (Hoehn and Yahr stages I-II). This study was an extension of an 11-week, double-blind, dose-ranging trial.

At 48 months, 60 patients had taken MIRAPEX continuously without the addition of levodopa. Of these patients, 46 had begun levodopa, discontinued the trial, or had not yet reached the 48-month time point.

Based on a 4-year, double-blind, randomized, controlled trial of 301 patients with early PD (Hoehn and Yahr stages I-II). Primary outcome was time from randomization to first occurrence of wearing off, dyskinesia, or on-off fluctuations, as measured by the Unified Parkinson's Disease Rating Scale.


Please see Brief Summary of Prescribing Information on adjacent page.
Table 1: The effects of 2-in-1 treatment on the number of ICs and PAHs.

<table>
<thead>
<tr>
<th>IC or PAH</th>
<th>Number 1</th>
<th>Number 2</th>
<th>Number 3</th>
<th>Number 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>IC 1</td>
<td>12</td>
<td>15</td>
<td>20</td>
<td>25</td>
</tr>
<tr>
<td>IC 2</td>
<td>18</td>
<td>22</td>
<td>28</td>
<td>32</td>
</tr>
<tr>
<td>IC 3</td>
<td>24</td>
<td>30</td>
<td>36</td>
<td>42</td>
</tr>
<tr>
<td>IC 4</td>
<td>30</td>
<td>36</td>
<td>42</td>
<td>48</td>
</tr>
</tbody>
</table>

Number 1: Control group. Number 2: Treatment group 1. Number 3: Treatment group 2. Number 4: Treatment group 3.

Table 2: The effects of 2-in-1 treatment on the number of ICs and PAHs.

<table>
<thead>
<tr>
<th>IC or PAH</th>
<th>Number 1</th>
<th>Number 2</th>
<th>Number 3</th>
<th>Number 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>IC 1</td>
<td>12</td>
<td>15</td>
<td>20</td>
<td>25</td>
</tr>
<tr>
<td>IC 2</td>
<td>18</td>
<td>22</td>
<td>28</td>
<td>32</td>
</tr>
<tr>
<td>IC 3</td>
<td>24</td>
<td>30</td>
<td>36</td>
<td>42</td>
</tr>
<tr>
<td>IC 4</td>
<td>30</td>
<td>36</td>
<td>42</td>
<td>48</td>
</tr>
</tbody>
</table>

Number 1: Control group. Number 2: Treatment group 1. Number 3: Treatment group 2. Number 4: Treatment group 3.

Table 3: The effects of 2-in-1 treatment on the number of ICs and PAHs.

<table>
<thead>
<tr>
<th>IC or PAH</th>
<th>Number 1</th>
<th>Number 2</th>
<th>Number 3</th>
<th>Number 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>IC 1</td>
<td>12</td>
<td>15</td>
<td>20</td>
<td>25</td>
</tr>
<tr>
<td>IC 2</td>
<td>18</td>
<td>22</td>
<td>28</td>
<td>32</td>
</tr>
<tr>
<td>IC 3</td>
<td>24</td>
<td>30</td>
<td>36</td>
<td>42</td>
</tr>
<tr>
<td>IC 4</td>
<td>30</td>
<td>36</td>
<td>42</td>
<td>48</td>
</tr>
</tbody>
</table>

Number 1: Control group. Number 2: Treatment group 1. Number 3: Treatment group 2. Number 4: Treatment group 3.

Table 4: The effects of 2-in-1 treatment on the number of ICs and PAHs.

<table>
<thead>
<tr>
<th>IC or PAH</th>
<th>Number 1</th>
<th>Number 2</th>
<th>Number 3</th>
<th>Number 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>IC 1</td>
<td>12</td>
<td>15</td>
<td>20</td>
<td>25</td>
</tr>
<tr>
<td>IC 2</td>
<td>18</td>
<td>22</td>
<td>28</td>
<td>32</td>
</tr>
<tr>
<td>IC 3</td>
<td>24</td>
<td>30</td>
<td>36</td>
<td>42</td>
</tr>
<tr>
<td>IC 4</td>
<td>30</td>
<td>36</td>
<td>42</td>
<td>48</td>
</tr>
</tbody>
</table>

Number 1: Control group. Number 2: Treatment group 1. Number 3: Treatment group 2. Number 4: Treatment group 3.

Table 5: The effects of 2-in-1 treatment on the number of ICs and PAHs.

<table>
<thead>
<tr>
<th>IC or PAH</th>
<th>Number 1</th>
<th>Number 2</th>
<th>Number 3</th>
<th>Number 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>IC 1</td>
<td>12</td>
<td>15</td>
<td>20</td>
<td>25</td>
</tr>
<tr>
<td>IC 2</td>
<td>18</td>
<td>22</td>
<td>28</td>
<td>32</td>
</tr>
<tr>
<td>IC 3</td>
<td>24</td>
<td>30</td>
<td>36</td>
<td>42</td>
</tr>
<tr>
<td>IC 4</td>
<td>30</td>
<td>36</td>
<td>42</td>
<td>48</td>
</tr>
</tbody>
</table>

Number 1: Control group. Number 2: Treatment group 1. Number 3: Treatment group 2. Number 4: Treatment group 3.
**POSTER SESSION 2**

**TUESDAY, JUNE 15**

Poster Viewing: 8:30 am to 5:00 pm
Authors Present Odd Numbers: 11:30 am to 12:30 pm
Authors Present Even Numbers: 4:00 pm to 5:00 pm

**Parkinson’s disease 1**

Poster numbers 344-694

P344 Dyskinesias predict the onset of motor response fluctuations in patients with Parkinson’s disease on L-dopa monotherapy
L. Mazzella, N. Huang, A. Di Rocco, M.D. Yahr
P345 An assessment of the impact of Parkinson’s disease on quality of life
W.C. Koller, M.B. Stern, L. Stone, J. Blazer
P346 The Hong Kong Parkinson’s Disease Registry: A multi-centre study of clinical and treatment profiles of ethnic Chinese patients using strict diagnostic criteria
J.H. Yeung, on Behalf of the Hong Kong Parkinson’s Disease Registry Group
P347 Immune-inflammatory changes in the substantia nigra in Parkinson’s disease
C.F. Orr, D.B. Rowe, G.M. Halliday
P348 Long-term efficacy and safety of Zydis® selegeline in Parkinson’s disease (PD)
M.F. Lew, R. Pahwa, J. Berti
P349 Emergency hospital admissions in idiopathic Parkinson’s disease
H.J. Woodford, R.W. Walker
P350 Spinal cord inhibitory mechanisms in early onset Parkinson’s disease: Evaluation of IB inhibition into soleus motor neurons
C.L. Scaglione, G. Rizzo, G. Lopane, M. Marchi, D. Resi, P. Martinelli
P351 Orthostatic hypotension and cognitive impairment in Parkinson’s disease: A cross sectional community-based study
L.M. Alcock, S. Tordoff, T. Hildreth, K. Wesnes, R. Kenny, D.J. Burn
P352 Pathoarchitectonic staging of brain destruction related to idiopathic Parkinson’s disease
H. Braak, K. Del Tredici, U. Rueb, R. de Vos, E. Steur, E. Braak
P353 Ergot side-effect issues in dopamine agonist treatment of Parkinson’s disease
K.A. Grosset, F. Needleman, G. Macphee, D.G. Grosset
P354 Nurr1 gene targeting therapy for Parkinson disease
W. Le, Q. Jiang, W. Xie, S. Hintermann, J. Jankovic
P355 Extensive oxidative stress and microglial activation in substantia nigra following intrastratalratal MPP+ injection
H. Miwa, Y. Kubo, S. Morita, I. Nakashisi, T. Kondo
P356 Are panic attacks and freezing episodes related?
A.N. Lieberman, C. Singer, A.N. Neophytdes
P357 Sex, gambling and Parkinson disease (PD)
A.N. Lieberman, A.R. Rezai
P358 Statins, Co Q 10, and Parkinson disease (PD): Is there a relationship?
A.N. Lieberman, J. Levine, R. Myerburg, L. Vela
P359 In vivo proton MR spectroscopy study of brain metabolism in Early-Onset Parkinson’s disease
C. Toron, C.L. Scaglione, R. Lodì, S. Iotti, B. Barbiroli, P. Martinelli
P360 Polysomnographic studies in Parkinson’s disease
D. Lee, K. Park, S. Koh, J. Han
P361 Abnormal temporal discrimination threshold and its responsiveness to levodopa treatment in Parkinson’s disease
M. Lee, H. Kim, C. Lyno, J. Kim
P362 Parkinson’s disease as an asymmetrical disorder: Does it matter which side presents first?
J.H. Yeung, on Behalf of the Hong Kong Parkinson’s Disease Registry Group

**P363** Gender differences in clinical features of Chinese Parkinson’s disease patients based on strict diagnostic criteria
J.H. Yeung, on Behalf of the Hong Kong Parkinson’s Disease Registry Group

**P364** Reduction of myocardial MIBG uptake is correlated with cognitive impairment in patients with Parkinson’s disease
K. Kashihara, M. Ohno

**P365** Non-motor off symptoms in Parkinson’s disease
J.W. Kim, W.J. Kim, S.M. Chun

**P366** Cochrane systematic review of catechol-O-methyl transferase (COMT) inhibitors for levodopa-induced complications in Parkinson’s disease
C.E. Clarke, K.H. Deane, S. Speiker

**P367** A clinical and videolaryngoscopic study in PD patients
M. Behari, J.P. Lazarus, K.K. Handa, T. Srivastava, V. Goyal, S. Singh

**P368** Voice profile and acoustic signs in Indian Parkinson’s disease patients

**P369** High dose dopamine agonist treatment
P. Odin, A. Storch, U. Paizser, W. Werner, R. Renner, M. Shing

**P370** The prevalence of Parkinson’s disease in an area of North Tyneside in the North East of England
R.W. Porter, R. Macfarlane, R. Walker

**P371** Stimulating music increases fine motor coordination in patients afflicted with morbus Parkinson
G.J. Bernatzky, P.P. Bernatzky, H.P. Hesse, E. Mueller, M. Grobovscheg, G. Ladunmer

**P372** Degenerative parkinsonian syndromes assessed by HmPaO-SPECT: The utility of factorial discriminant analysis
A. Kreisler, L. Deltebre, P. Lecouffe, A. Duhamel, M. Steinfing, A. Destée

**P373** Effectiveness of milnacipran in treatment of depression associated with Parkinson’s disease
T. Maruyama, T. Hashimoto, Y. Chiba

**P374** Double vision in Parkinson’s disease
A. Nebe, E. Georg

**P375** Gait changes in de novo Parkinson’s disease patients: A force / rhythm dichotomy
R. Baltadjieva, N. Giladi, Y. Balash, T. Herman, J.M. Hausdorff

**P376** Treadmill walking as an external cue to improve gait rhythm and stability in Parkinson’s disease
S. Toledo-Frankel, N. Giladi, L. Gruendlinger, R. Baltadjieva, T. Herman, J.M. Hausdorff

**P377** Effects of rhythmic auditory stimulation on gait dynamics in Parkinson’s disease
J. Lowenthal, L. Gruendlinger, R. Baltadjieva, T. Herman, J.M. Hausdorff

**P378** Executive function, mental loading and gait variability in Parkinson’s disease
G. Yoge, N. Giladi, E.S. Simon, L. Gruendlinger, J.M. Hausdorff

**P379** Clinical and electrophysiological study of hand deformity in Parkinson’s disease
H. Okano, C. Ooishi, K. Nishiyama, M. Sakuta

**P380** Electroconvulsive therapy in Parkinson’s disease
R. Faber

**P381** Activation in deep brain structures during therapeutic DBS of the STN in patients with PD revealed by functional MRI

**P382** Value of early [123I]β-CIT SPECT imaging in the differential diagnosis of parkinsonian syndromes
D. Stoffers, L. Bosscher, J. Boeij, A. Winogrodzka, E.C. Wolters, H.W. Berendse

**P383** The effect of botulinum toxin injections to the calf muscles on freezing of gait in Parkinson’s disease, double blind placebo controlled study
T. Gurevich, C. Peretz, O. Moore, N. Weizmann, N. Giladi
P448 Neuroprotection against striatal 6-OHDA-induced dopaminergic
eurodegeneration by the adenosine A2A antagonist CSC is not associated
with a normalization of the indirect striatopallidal pathway activity
J. Bové, J. Serrate, G. Mengod, R. Corte, M. Toledo, C. Marin

P449 Prolonged practice scarcely improves bradykinesia in Parkinson’s disease
R. Agostino, A. Curra, G. Soldati, L. Chiacciani, N. Modugno, F. Pierelli

P450 A pilot study of the incidence and long-term outcome of Parkinson’s
disease and other parkinsonian disorders in North-East Scotland
K.S. Taylor, C.E. Counsell, J.C. Gordon, C.E. Harris

P451 Plasma homocysteine and clinical characteristics in Parkinson’s disease

P452 Manganese exposure and risk of Parkinson’s disease in twins
S.M. Goldman, P.J. Quinlan, A.R. Smith, J. Langston, C.M. Tanner

P453 The use of pyridoxine in Parkinson’s disease: A pharmacogenetic
evaluation
E. Tan, S. Cheah, K. Yew, Y. Tan

P454 Regional cerebral blood flow and MRI white matter hyperintensities in
patients with Parkinson’s disease and cognitive impairment
M. Deroviko, J. Swatek, P. Lass, D. Wieczorek, M. Dubaniewicz

P455 Comparing the kinetics and kinematics of gait in patients with Parkinson’s
disease and control subjects

P456 Ability to drive of Parkinson’s disease patients: Evaluation on driving
simulator
S. Compere, A. Blanchard, L. Defebvre, A. Thevenon

P457 Impact of Parkinson’s disease on patients’ adolescent and adult children
A. Schrag, D. Morley, N. Quinn, M. Jahanshanah

P458 Factors contributing to caregiver burden and carer quality of life in
Parkinson’s disease
A. Schrag, A. Hovris, D. Morley, N. Quinn, M. Jahanshanah

P459 Role of extracellular signal-regulated protein kinase in neuronal cell death
induced by glutathione depletion in neuron/glia mesencephalic cultures
S. de Bernardo, S. Canals, M. Casarejos, R. Solano, J. Menendez, M. Mena

P460 Psychogenic parkinsonism with intravenous apomorphine abuse leading
to peak-dose dyskinesias
S. Happe, M. Sommer, J. Meller, M. Knauth, C. Tenkwalder, W. Paulus

P461 A study to assess the validity and utility of DATSCAN spect in the
diagnosis of parkinsonism in the real life
F. Stocchi, R. Massa, L. Vacca, M. Valente, P. Grassini, C. Pauletti

P462 Effects of antiparkinsonian drugs on plasma Homocysteine
P. Lambert, S. Zoccolaletta, M. de Mari, A. Fraddosio, G. Iliceto, P. Livrea

P463 Analysis of response to enteral infusion of levodopa in patients with
Parkinson’s disease
J. J. Westin, D. Nyholm, T. Groth, M. D. Dougerty, S. E. Pahlagen

P464 12 months of subthalamic stimulation in Parkinson’s disease: Improvement
of the off duration and severity and correlation with quality of life
and performances in activities of daily living
A. Tropeani, F. Valzania, C. Sturiale, S.A. Nassetti, F. Calbucci, C.A. Tassinari

P465 Dopamine D1 but not D2 receptors mediate anti-parkinsonian actions of
the D1/D2 receptor agonists, S32504 and ropinirole, in the MPTP-lesioned
marmoset model of Parkinson’s disease

P466 The accuracy of pointing movements to remembered visual targets in
Parkinson’s disease
N. Keijers, B. Bloem, M. Miranda, L. Coobs, S. Gielen

P467 Ropinirole is highly effective on motor function as adjunct therapy to L-
dopa in Japanese patients with Parkinson’s disease
Y. Mizuno, T. Abe, K. Hasagawa, S. Kuno, T. Kondo, M. Yamamoto

P468 The preparation and execution of sequential movements in individuals with
Parkinson’s disease (PD)
K. Thomson, M. Anderson, G. Hammond, F. Mastaglia, G. Thickbroom, M. Burns
P490 The effect of a 12-week vestibular rehabilitation therapy program on
P489 Is depression a predictor of outcome after bilateral subthalamic deep
P488 Cardiovascular changes and perceived exertion during isometric exercise
P487 The two towers, Parkinson’s disease and cognition
P486 Parkinson’s disease, blepharospasm and apomorphine; a case report
P485 Natural evolution of dysarthria in Parkinson’s disease
P484 Polymorphism of the prion protein gene in German patients with Parkinson’s disease
P483 Pharmacokinetic and pharmacodynamic analysis of levodopa-induced
dyskiniesias in advanced Parkinson’s disease
P482 Subjective estimation of body boundaries is altered in autopsy verified Lewy body
Parkinson’s disease
P481 Change in visual information alters postural stability among Parkinson’s disease
patients
P480 The burden of Parkinson’s disease in Spain
E. Cubo, A. Elena, C. Morant, J. de Pedro Cuesta, P. Martinez Martinuten, R. Genova
P479 In vivo neuropathology of Parkinson’s disease (PD): Loss of 18F-dopa
takeup in motor cortex
R.Y. Moore, A.L. Whone, D.J. Brooks
P478 Mechanism of action of levodopa toxicity in rat E14 ventral mesencepha-
ton primary cultures
M.W. Khan, R.A. Bakay
P477 COMT alleles and motor fluctuations in autopsy verified Lewy body
Parkinson’s disease
A.H. Rajput, R. Camicioli, C. Reece, M.L. Rajput, A.H. Rajput
P476 The push and release test: An improved clinical postural stability test for
patients with Parkinson’s disease
F.B. Horak, J.V. Jacobs, V.K. Tran, J.G. Nugt
P475 The effect of stooped posture in Parkinson’s disease on multidirectional
postural responses
J.V. Jacobs, D.M. Dimitrova, J.G. Nugt, F.B. Horak
P474 The caregivers’ burden, depression, and anxiety in Parkinson’s disease
J.-H. Im, S.R. Kim, S.J. Chung, M.C. Lee
P473 The control of volitional eye movements in Parkinson’s disease: Self-
pacing and reprogramming saccades
C. Winograd-Gurvich, N. Georgiou-Karistianis, L. Milliot, O.B. White
P472 Caspase-11 and microglia mediate LPS-induced substantia nigral
dopaminergic neurotoxicity in mice
H. Arai, H. Mochizuki, M. Miura, Y. Mizuno
P471 Pain-pressure threshold in patients with Parkinson’s disease with and
without dyskinesias
L. Velà, K.E. Lyons, C. Singer, A.N. Lieberman
P470 Cognitive predictors of dementia in Parkinson’s disease
C. Janvin, D. Aarsland, J. Larsen, K. Hugdahl
P469 Cognitive profile of patients with Parkinson’s disease and dementia
C. Janvin, D. Aarsland, J. Larsen, K. Hugdahl
P511 The role of an acupuncture protocol in the treatment of Parkinson’s disease
A. Cristian, R.H. Walker

P512 Exploratory analysis of the effect of entacapone on homocysteine levels in Parkinson’s disease patients

P513 Hyperhomocysteineemia in levodopa-treated Parkinson patients prevented by entacapone
J. Benetich, P. Valkovic, P. Blaziek, L. Valkovicova, K. Gnitterova, P. Kukumberg

P514 Parkinson mutations and early-onset parkinsonism in Taiwanese (ethnic Chinese)
R. Wu, R. Bounds, S. Lincoln, M. Huhihan, C. Lin, W. Hwu

P515 Antipsychotic use in patients on dopaminergic therapy in Ontario, Canada
C. Marras, A. Kopp, A.E. Lang, K. Sykora, K. Sluman, P.A. Rochon

P516 Stem cells from human bone marrow to dopaminergic-like neurons

P517 AD4, a novel brain-target antioxidant, attenuates haloperidol-induced dyskinesia in rats

P518 Effects of whole-body vibration on postural control in Parkinson’s disease
D. Schmidtbleicher, S. Turbanski, C.T. Haas

P519 Association study of CYP2D6 gene polymorphism with pergolide-induced adverse effects in patients with Parkinson’s disease
M. Watanabe, N. Ohkoshi, K. Yoshizawa, T. Yoshizawa, A. hayashi, S. shoji

P520 Regenerative cells in mouse substantia nigra
K. Yoshimi, Y. Yim, M. Yamada, M. Onodera, H. Mochizuki, Y. Mizuno

P521 Prevalence of parkinsonism in a large cohort of welders

P522 A rapid method for mass screening for parkinsonism

P523 Dietary fatty acids and the risk of Parkinson’s disease
L.M. de Lau, M. Bornebroek, J.C. Witteman, A. Hofman, P.J. Koudstaal, M.M. Breteler

P524 Cerebral autoregulation in patients with Parkinson’s disease: A transcranial doppler study
H. Groetzsch, N. Vokatch, F.R. Burkhard, R. Sztajzel

P525 The Old Fisherman: An antique witness of Parkinson’s disease
J.-E.G. Vanderheyden

P526 Effect of levodopa and DBS on anticipatory postural adjustments in Parkinson’s disease
J.H. Bower, D.M. Maraganore, B.J. Peterson, J.E. Ahlskog, W.A. Rocca

P527 Escalopram for the treatment of major depression in Parkinson’s disease: Impact on depression, cognition, and motor function
D. Weintraub, D. Taraborrelli, J.E. Duda, P.J. Moberg, I.R. Katz, M.B. Stern

P528 “The Swedish Parkinson Cohort Study” - An interim analysis after 7 years
J.E. Olsson

P529 Severe striatal damage after long-term exposure to hydrocarbon-solvents: DATScan data in patients with Parkinson’s disease
M. Canesi, R. Bentit, R. De Notaris, A. Antonini, G. Pezzoli

P530 MAOBI therapy in early Parkinson’s disease: A systematic review of randomised controlled trials

P531 Alterations in striatal NMDA receptor subunits associated with the development of dyskinesia in the MPTP-lesioned macaque model of Parkinson’s disease
P.J. Hallett, A.W. Dunah, A.R. Crossman, J.M. Brotchie, D.G. Standaert

P532 Source generators of evoked potentials from subthalamic nucleus deep brain stimulation
D. Cunic, G. Paradiso, E. Moro, A.E. Lang, A.M. Lozano, R. Chen

P533 Activation study in Parkinson’s disease by MRS
K. Isonishi, F. Moriwake, K. Itoh, S. Kaneko, T. Kashiwaba

P534 Offactory function among Parkinson’s disease patients - Study using intravenous olfactometry
J.-I. Nunomura, O. Uehara, H. Nara, H. Sasaki, K.-I. Tsushima, T. Mikami

P535 Immunohistochemical study revealed no significant reduction of tyrosine hydroxylase (TH) -positive fibers in peripheral tissues in patients with Parkinson’s disease
T. Kojo, T. Uchihara, T. Amino, A. Takahashi, S. Orimo

P536 The cultural divide: Barriers in the ascertainment and treatment of Parkinson’s disease in the Navajo
A. Singleton, K. Parko, L. Clark, J. Barr, J. Marjama-Lyons

P537 Overexpression of Ubiquitin Carboxyterminal Hydrolase-L1 (UCH-L1) in dopaminergic neurons of rat substantia nigra by rAAV vector
K. Wada, T. Yasuda, M. Yamada, H. Mochizuki, K. Wada, Y. Mizuno

P538 Rasagiline treatment can improve freezing of gait in advanced Parkinson’s disease; a prospective randomized, double blind, placebo and entacapone controlled study
N. Giladi, on Behalf of the European LARGO Study Group**

P539 Dementia in Parkinson disease. Prevalence and clinical correlates in a nationwide population of brain donors
S. Papapetropoulos, J. Gonzalez, A. Lieberman, D.C. Mash

P540 Coherent beta oscillations in the subthalamic nucleus and cerebral cortex of the 6-OHDA dopamine depleted rat

P541 Inflammation and Parkinson’s disease: A case-control study
J.H. Bower, D.M. Maraganore, B.J. Peterson, J.E. Ahlskog, W.A. Rocca

P542 Leg muscle activation patterns during parkinsonian gait: Surface-electromyographic assessment of visual cueing and L-DOPA effects
M. Capecci, V.G. Bombace, T. Droboselli, L. Provinciali, M.G. Ceravolo

P543 Nurr1 expression in the remaining nigral dopaminergic neurons in Parkinson’s disease
K. Kompoliti, Y. Chu, J. Kordower

P544 Driver landmark identification and safety errors in mild-moderate Parkinson’s disease
E.Y. Uc, M. Rizzo, O. Shi, S.W. Anderson, R.L. Rodnitzky, J.D. Dawson

P545 Cortical [[18F]fluorodopa uptake and frontal cognitive functions in early Parkinson’s disease
A. Brock, S. Aalto, E. Nurmi, J. Bergman, J.O. Rinne

P546 A neuropsychological study of prevalence of dementia in Parkinson’s disease: The outcome of the 15 year follow-up from the Sydney Multicentre Study
W.G. Reid, G.M. Halliday, M.A. Holy, J.G. Morris, M.A. Adena, R. Traficante

P547 Tau gene and Parkinson’s disease; a case-control study and meta-analysis
D.G. Healy, P.M. Abou-Sleiman, A.J. Lees, N. Quinn, K. Bhatia, N.W. Wood

P548 Gambling in Parkinson’s disease
H.L. Tyne, G. Medley, E. Ghadiali, M.J. Steiger

P549 Is the EMG-pattern in the lower limbs before freezing in Parkinson’s disease influenced by provocation strategy?
A.M. Nieuwboer, R. Dorm, A.-M. Willems, K. Desloovere, L. Janssens, F. Chavret

P550 Pesticide use and risk of Parkinson disease: A family-based case-control study
W.K. Scott, L. Zhang, J.M. Stajich, B.L. Scott, M.A. Stacy, J.M. Vance

P551 Asymmetry of Parkinson’s disease: The influence of handedness
R.J. Uitti, Y. Baba, Y. Tsuibo, A.J. Strongosky, Z.K. Wisokely, J.D. Putzke

P552 The utility of the frontal systems behavior scale (FrSBe) in the pre-surgical evaluation of Parkinson’s disease
R.M. Busch, R. Shaw, H.D. Stott, A. Rezai, C.S. Kubu
P553  Effects of pesticides on proteasomal activity and cell viability in HEK and SH-SYSY cells
X.-F. Wang, X.-S. Li, J.M. Brontsema

P554  Do clinical trial infrastructures impact enrollment rates and baseline demographics in early Parkinson’s disease (PD) studies?
C. Kamp, A. Shinarman, K. Klieburzt, B. Ravina, B. Tilley, A. Brocht, K. Shannon, C.M. Tanner, F.G. Wooten, P. Yuko, E. Jordan

P555  Randomized, double-blind study of zonisamide with placebo in advanced Parkinson’s disease
M. Murata, K. Hasegawa, I. Kanazawa, the Japan Zonisamide Study Group

P556  Pallidal procedures for Parkinson’s disease. Preliminary results with 14 patients

P557  Deficits of decision-making relating to mind-reading ability in Parkinson’s disease
M. Kawamura, R. Oeda

P558  Genetic variations in brain iron metabolism in Parkinson’s disease

P559  “Chin on chest” phenomenon in Parkinson’s disease
C. Insisi, H. Okano, A. Chiba, M. Sakuta

P560  Effect of high frequency stimulation of the subthalamic nucleus on respiratory control in patients with Parkinson’s disease

P561  Comparison of the MMP brief cognitive test and the Mattis Dementia Rating Scale in 120 patients with Parkinson’s disease

P562  DJ-1 immunoreactivity in control and idiopathic Parkinson’s disease brain: Correlation with DJ-1 mRNA expression

P563  A comparative randomised study of rasagiline versus placebo or entacapone as adjunct to levodopa in Parkinson’s disease (PD) patients with motor fluctuations (the LARGO Study)
O. Rascol, on behalf of the LARGO Study Group**

P564  Blockade of nociceptin/orphanin FQ transmission attenuates hypokinesia in hemiparkinsonian rats
M. Marti, F. Mela, C. Trapella, C. Bianchi, M. Morari

P565  A pilot study of the novel dopamine stabiliser ACR16 in advanced Parkinson’s disease
J. Teddoff, C. Sonesson, N. Waters, S. Waters, A. Carlson

P566  Use of trimethobenzamide for the control of nausea in advanced Parkinson’s disease patients treated with subcutaneous apomorphine
D.B. Dewey, Jr., the APO-401 Investigators

P567  Investigation of the ability of the dopamine agonist ropinirole to reverse L-dopa-induced dyskinesias in MPTP-treated marmosets
P. Jenner, S. Rose, L. Smith, M. Jackson, G. Al-Barghouthy

P568  The incidence and clinical significance of orthostatic hypotension in advanced Parkinson’s disease patients treated with subcutaneous apomorphine
D. Pahta, the APO-303 Investigators

P569  The tolerability of intermittent subcutaneous apomorphine in patients with advanced Parkinson’s disease
D. Koller, D. Pahta, the APO-303 Investigators

P570  Lower urinary tract symptoms in patients with Parkinson’s disease: Correlation with severity of neurologic dysfunction based on different symptom scales
C.M. Games, R.I. Lopes, Z.M. Sammour, E.R. Barbosa, M.S. Haddad, F.S. Sallem

P571  Reduced sural sensory nerve action potential (SNAP) amplitude as a possible diagnostic indicator of autosomal recessive juvenile parkinsonism (PARK2)
Y. Sunada, Y. Ohsawa, K. Kurokawa, M. Sonoo, S. Henmi, K. Iwatsuki

P572  Modulation of protein expression in vitro by electrical stimulation as a function of frequency
R. Xia, F. Berger, B. Pfallat, M. Bayle, A. Bouamrani, A.L. Benabid

P573  Amygdalar and hippocampal MRI volumetric reductions in Parkinson’s disease with dementia

P574  Pharmacokinetics of apomorphine nasal powder: An ascending dose study
P. Lambert, S. Freear

P575  Efficacy, tolerability and safety of mirtazapine in the treatment of major depressive disorder due to Parkinson disease
R. Weiser, J. Hernandez-Rojas, J. Flores, M. Gallardo, M. Garcia, M. Grau

P576  Predicting incident non-motor complications of dopaminergic therapy in patients with early Parkinson’s disease: A secondary analysis of the CALM-PD trial

P577  A prospective evaluation of the tolerability and safety of Stalevo™ (carbidopa, levodopa and entacapone) in Parkinson’s disease patients experiencing wearing-off
W. Koller, D. Silver, M. Guarnieri, J. Hubble, A. Rabinowicz

P578  Parkinson’s disease: A clinical study of factors with impact on quality of life. Predictors for nursing home placement
M.E. Toma, A. Di Rocco, M.D. Yahr

P579  Subthalamic nucleus stimulation improves balance reactions in Parkinson’s disease
J.E. Visser, J.H. Allum, M.G. Carpenter, M. Bakker, R.A. Esselink, B.R. Bloom

P580  Frequency of orthostatic hypotension as a cause of orthostatic intolerance in Parkinson disease
K.F. Nahm, S. Nouri, M.D. Yahr, H.C. Kaufmann

P581  Fibroblast growth factor 20 polymorphisms and haplotypes strongly influence risk of Parkinson disease

P582  A longitudinal study of the motor response to levodopa in Parkinson’s disease

P583  Saccadic eye movements in Parkinson’s disease with and without dementia
U.P. Mosimann, R.M. Mueri, D.J. Burn, J.T. O’Brien, I.G. McKeith

P584  The PDQ-39 is a sensitive measure of change in quality of life in early Parkinson’s disease
N.J. Ives, C. Jenkinson, R. Fitzpatrick, K. Wheatley, C.E. Clarke, PD MED Collaborative Group

P585  Effect of rasagiline on severity of OFF in Parkinson’s disease
F. Stocchi, on behalf of the LARGO Study Group**

P586  Dopamine agonist therapy in early Parkinson’s disease: A systematic review of randomised controlled trials

P587  Growth hormone response to low-dose apomorphine in patients with restless legs syndrome and Parkinson’s disease
S. Happe, K. Helsmischmied, T. Tings, W. Wuttke, W. Paulus, C. Trenkwalder

P588  Relationship between nigrostriatal dopaminergic degeneration and urinary symptoms in Parkinson’s disease
K. Winge, L. Friberg, L. Werdelin, K.K. Nielsen, H. Stimpel

P589  Rapid improvement in balance of patients with Parkinson’s disease through training based on movements guided by rhythmic cues
M.E. Pliemonte, E.S. Takata, M.C. Moura, T.T. Capato, M.C. Fernari, E.R. Barbosa
POSTER SESSION 2

P590 Rapid gait improvement in patients with Parkinson’s disease through training based on movements guided by rhythmic cues  
T.T. Caputo, E.S. Takata, M.C. Moura, M.C. Fornari, E.R. Barbosa, M.E. Piemonte

P591 Assessment into the impact of depression, fatigue, apathy and daytime sleepiness on motor performance, independence in daily life activities and quality of life for patients with Parkinson's disease  
F.M. Semeraro, T.T. Caputo, E.O. Hattori, E.R. Barbosa, M.E. Piemonte

P592 A unilateral toxin-induced mouse model for Parkinsons disease  
R. Iancu, P. Mohapel, P. Brundin, G. Paul

P593 Long term effectiveness of a physiotherapeutic scheme, based on a supervised weekly program of home-exercises, for patients with Parkinson’s disease in early and advanced stages of evolution: 24-month interim report  
M.E. Piemonte, D.M. Almeida, K. Burgi, M.C. Melo, M.M. Morimoto, E.R. Barbosa

P594 Effects of bilateral and unilateral subthalamic nucleus deep brain stimulation on Parkinson disease symptoms  
M. Ushe, M. Hong, J.W. Mink, F. Revilla, J.L. Dowling, J.S. Perlmutter

P595 A new bilateral rat model of Parkinson’s disease  
V. Paillé, L. Lescaudron, P. Bracht, P. Damier

P596 A prospective study of reduced impulse control in patients with idiopathic Parkinson's disease  
C.S. Kubu, R.M. Busch, R. Shaw, H.D. Stott, A. Ahmed, A. Rezai

P597 Oral festination in Parkinson’s disease  
C. Moreau, C. Ozsanalc, J.L. Blatt, P. Derambure, A. Destee, L. Defebvre

P598 Parenteral treatment of acute psychosis in Parkinson’s disease with ziprasidone  
M. Oechsner, A. Korchnou

P599 Levodopa-induced hyperhomocysteinemia and cardiovascular dysfunction in Parkinson's disease  

P600 Alpha-synuclein pathology does not predict extrapyramidal signs or cognitive impairment  
I. Alafuzoff, T. Kauppinen, T. Pirttilä, J. Autere, L. Parkkinen

P601 Prospective study on the use of ropinirole in patients with advanced Parkinson’s disease  
M. Reja, S. Telarovic

P602 Abnormal cortical oscillatory activity in voluntary muscle relaxation in de novo Parkinson’s disease  

P603 Pribedil efficacy in monotherapy (150 to 300 mg/day) in de novo parkinsonian patients: A 6-month planned intermediate ANALYSIS of the 2-year Parkinson- regained study  
O. Rascol, O. Gershank, O. Bli, J. Ferreina, N. Bodjarina, A. Lees

P604 The pharmacological and biological effects of pramipexole on dopamine neuron associated genes: DAT, VMAT-2, and Nurr1  
T. Pan, W. Xie, J. Jankovic, W. Le

P605 Istradefylline (KW-6002) as adjunctive therapy in patients with advanced Parkinson's disease: A positive safety profile with supporting efficacy  
M.A. Stacy, the US-005 and US-006 Investigator Group

P606 Combined use of NMDA and AMPA antagonists further reduces levodopa-induced dyskinesias in MPTP-lesioned primates  
F. Bibbiani, A. Kielata, T.N. Chase

P607 Onset of action of intermittent subcutaneous apomorphine in the treatment of “off” episodes in patients with advanced Parkinson’s disease  
K.L. Hull, Jr., L. Gutman, the APO-302 Investigators

P608 Is levodopa-induced dyskinesias risk decreased in parkinsonian patients initially treated with dopamine agonists? A longitudinal study among 425 patients  
L. Ouchchane, S. Perrette, N. Saikali, B. Aublet-Cuvelier, F. Durif

P609 Decrease in UPDRS motor scores following intermittent subcutaneous apomorphine for 6 months in patients with advanced Parkinson’s disease  
D.M. Trosch, the APO-303 Investigators

P610 Subthalamic nucleus stimulation improves manipulative finger force control in Parkinson’s disease  

P611 Parkin is a potential modifier of the phenotype of α-synuclein-associated familial Parkinson’s disease  
K. Markopoulou, D.W. Dickson, R.D. McComb, L. Averly, B.A. Chase

P612 Incidence of PD, depression, and dementia at the primary care level – additional results of a questionnaire survey for the early diagnosis of PD  
A. Metz, E. Baum, I. Risling, G. Hoeglinger, V. Ries, W.H. Gertel

P613 Personality and behavior changes after subthalamic nucleus deep brain stimulation in Parkinson's disease (STN-DBS): A retrospective study  
A. Gronchi-Perrin, S. Viollier, J.A. Ghika, P.R. Burkhard, J.-G. Villenune, F.J. Vingerhoets

P614 Apomorphine subcutaneous injection in a patient who has undergone surgical treatment of Parkinson's disease with deep brain stimulation  
D.M. Swope

P615 Combining dopamine agonists of different dopamine receptor profiles in advanced Parkinson’s disease  
F. Sixel-Doering, M. Rausch-Hertel, H. Klinke, C. Trenkwalder

P616 Gender and the Parkinson’s disease phenotype  
Y. Baba, J.D. Pfluke, A.J. Strongosky, M.F. Turk, Z.K. Wiszolek, R.J. Uitti

P617 Intraoperative tapping test for clinical monitoring during deep brain stimulation surgery in Parkinson’s disease  
A. Pesenti, V. Chiesa, F. Tamma, E. Caputo, G. Ardolino, P. Rampini

P618 Asymmetry of overactivity between left and right subthalamic nucleus parallels severity of extremity symptoms in Parkinson's disease patients  
C.C. Kao, D.F. Charles, T.L. Davis, J.Y. Fang, J.R. Albea, P.E. Konrad

P619 Alzheimer disease (AD) pathology in patients clinically and pathologically diagnosed with Parkinson disease (PD). Are the symptoms different?  
S. Papapetropoulos, J. Gonzalez, A. Lieberman, D.C. Mash

P620 Subthalamic nucleus deep brain stimulation (STN DBS) in idiopathic Parkinson’s disease (IPD): Predictive value of intra-operative (IO) improvement of motor function to long-term outcome  
H. Bronte-Stewart, R. Rajan Das, G. Fujikami, M. Urbano, M. Koop, G. Holt

P621 How long after the onset of motor symptoms does dementia in Parkinson’s disease arise?  
E.M. Dunn, N.L. Read, T.A. Hughes, R.H. Mindham, E.G. Spokes

P622 Can we measure the effectiveness of a Parkinson’s disease (PD) club at improving PD care?  

P623 Protesomal inhibition leads to nigral degeneration with ubiquitin positive inclusions in mice  
T. Hatano, N. Hattori, Y.C. Kawamura, Y. Imamichi, H. Kaneko, Y. Mizuno

P624 “Off” time reduction from adjunctive use of istradefylline (KW-6002) in levodopa-treated patients with advanced Parkinson’s disease  

P625 Nocardia asteroides: A possible environmental cause of Parkinson’s disease?  
P.A. LeWitt, B.L. Beaman, D.A. Camp, D.A. Loeffler

P626 Risk factors for vascular disorders are reduced in Parkinson’s disease: A positive safety profile with supporting efficacy  
T. Pan, W. Xie, J. Jankovic, W. Le

P627 Plasma brain natriuretic peptide (BNP) levels in Parkinson’s disease  

P628 Sensory dysfunction in idiopathic Parkinson’s disease  
P629 Patient home diary: A reproducible and reliable tool to assess motor complications in Parkinson’s disease
M. Faigl, J.-M. Nguyen, P. Damier

P630 The side effect profile of cabergoline, an ergot agonist; a clinical follow up study in Parkinson’s disease and restless legs syndrome
F. Stegje, P. Metcaff, V. Dhawan, A. Williams, A. Forbes, K.R. Chaudhuri

P631 Safinamide add-on to levodopa and dopamine agonist treatment in Parkinson disease. An open escalating dose study
F. Stocchi, L. Vaccar, P. Grassini, G. Battaglia, M. Altitbrandi, S.A. Ruggieri

P632 Neuroprotective role of nicotine, cigarette smoke and cigarette extracts against MPTP-induced neurotoxicity
A. Hild, V. Marchand, B. Dumery, E.C. Hirsch

P633 Internalization of D1 but not D2 dopamine receptors after levodopa treatment and absence of internalisation after ropinirole treatment
M.-P. Muriel, G. Oriol, E.C. Hirsch

P634 Neurosurgery for Parkinson’s disease at an early stage: Impact on quality of life and social adjustment (preliminary results at 12-months)

P635 Genetics of α-synucleinopathies
M. Ffer, P. Fals, S. Lincoln, D. Dickson, A. Hope, C. Van Broeckhoven

P636 Articulatory kinematics and speech dysfunction in patients with Parkinson’s disease
S.A. Venkatesan, V.V. Venkatachalam, L.R. Ranganathan, Y.S. Subramanian

P637 Biochemical analysis of missense mutations in ceruloplasmin (CP) in Parkinson disease

P638 Neuroprotection of dopaminergic neurons by electroconvulsive shock in an animal model of Parkinson’s disease
G.A. de Eursquain, A. Anastasia, R. Reynose, H. Lópex Morra, D.H. Masó

P639 Consumption of milk and calcium in mid-life and the future risk of Parkinson’s disease
G.W. Ross, M. Park, H. Retorvich, L.R. White, C.M. Tanner, R.D. Abbott

P640 Fas and Bcl-2 expression in T leucocytes of patients with Parkinson’s disease
S. Bostantopoulou, Z. Katsarou, O. Hatziizi, G. Kyriazis

P641 Systematic RNA screening for effectors of α-synuclein folding and degradation in C. elegans
K.A. Caldwell, S.B. Fulghum, S. Cao, G.A. Caldwell

P642 Systemic exposure to prototype inhibitors causes progressive parkinsonism in rats
K.S. McNaught, C.W. Olano

P643 Efficacy and safety of α-dihydroergocryptine in the treatment of early and advanced Parkinson’s disease: An open-label study

P644 Depression in a group of Puerto Rican patients with Parkinson’s disease
I.L. Pita, C. Serrano, V. Wolof

P645 Analysis of dynamics of gait in Parkinson’s disease

P646 Cardiac sympathetic nerve denervation may occur in the early stage of Parkinson’s disease

P647 Preclinical prediction of the best contact in STN stimulated PD patients
A.L. Benabid, B.A. Wallace, S. Chabardes, A. Batir, V. Fraix, P. Pollak

P648 Electrophysiological evaluation of autonomic function in Parkinson disease
M. Umairubahan, V.C. Uthamarayan

P649 Glucocerebrosidase gene mutations in Ashkenazi Jewish patients with Parkinson disease
J. Aharon-Peretz, H. Rosenbaum, G. Gershoni-Baruch

P650 Analysis of gait pattern in Parkinson’s disease: Relationship to clinical features

P651 Usefulness of statistical image analysis (SPM/ezIS) based on brain perfusion SPECT in patients with Parkinson’s disease—relation with excessive daytime sleepiness—
N. Sasaki, H. Watanabe, F. Maki, H. Sugihara, M. Kawakami, Y. Takahashi

P652 Effects of STN deep brain stimulation on gait stability in advanced Parkinson’s disease: Disparity between UPDRS scores and gait stability
J.M. Hausdorff, D. Tarsy, L. Solomon, J. Lundling

P653 Prevental of Parkinson’s disease in Central Russia based on population survey
O.S. Levin, M.A. Lobov, L.V. Dokadina, V.N. Shjok

P654 Gait disorder and cognitive impairment in patients with Parkinson’s disease
N.A. Unzhenoko, O.S. Levin, D.Y. Olyunin

P655 Emotion and decision making in Parkinson’s disease: Effects of levodopa and subthalamic nucleus (STN) stimulation
I. Benatru, N. Camille, S. Thoiaos, P. Mertens, A. Sirigu, E. Brussolle

P656 Neuropsychological study in patients with Parkinson’s disease and long-term exposure to hydrocarbon-solvents
D. De Gaspari, M. Canesi, C. Arti, G. Pozzoli

P657 Levodopa associated homocysteine increase and sural axonal neurodegeneration
T. Moller, K. Renger, W. Kuhn

P658 Family caregivers of Parkinson’s disease patients deserve professionals attention and support: A report from one year of experience with caregivers’ clinic
O. Moore, N. Giladi

P659 Predictors of long-term efficacy pramipexole therapy in patients with Parkinson’s disease
I.O. Smolentseva, O.S. Levin, B. Tserensodnom, N.V. Fedorova, L.V. Dokadina

P660 Dissociation of emotional and voluntary facial movements in Parkinson’s disease
H. Topka, C. Rolly, D. Wildgruber, J. Dichtans

P661 Statistical issues in analysis of a large simple neuroprotection trial (LST) in Parkinson’s disease (PD)

P662 The zona incerta may be a better target than the subthalamic nucleus for deep brain stimulation for Parkinson’s disease

P663 Dyskinesias induced by subthalamotomy unresponsible to NMDA inhibitor amantadine
M. Morrello

P664 High frequency STN stimulation activates associative projection cortices of the basal ganglia and improves memory function in patients with advanced Parkinson’s disease
E. Kalbe, R. Hiler, B. Burpahaus, K. Herholz, J. Kessler, V. Strun

P665 Homocysteine levels and MTHFR C67T genotype in patients with Parkinson’s disease with and without levodopa therapy
E. Dzoljic, I. Novakovic, D. Mirkovic, Z. Todorovic, M. Prostran, V. Kostic

P666 History of obsessive compulsive behavior, younger age of symptoms onset and treatment with dopamine agonists are risk factors for the development of addiction-like behavior in patients with Parkinson’s disease
N. Giladi, N. Weitzman, C. Peretz, H. Shabal, S. Schreiber

P667 Plasma concentrations of fluoxetine and motor signs in patients with Parkinson’s disease
E. Dzoljic, I. Novakovic, D. Mirkovic, Z. Todorovic, M. Prostran, V. Kostic

P668 Homocysteine levels and MTHFR C67T genotype in patients with Parkinson’s disease
E. Dzoljic, I. Novakovic, D. Mirkovic, Z. Todorovic, M. Prostran, V. Kostic

P669 Predictors of long-term efficacy pramipexole therapy in patients with Parkinson’s disease
I.O. Smolentseva, O.S. Levin, B. Tserensodnom, N.V. Fedorova, L.V. Dokadina

P660 Dissociation of emotional and voluntary facial movements in Parkinson’s disease
H. Topka, C. Rolly, D. Wildgruber, J. Dichtans

P661 Statistical issues in analysis of a large simple neuroprotection trial (LST) in Parkinson’s disease (PD)

P662 The zona incerta may be a better target than the subthalamic nucleus for deep brain stimulation for Parkinson’s disease

P663 Dyskinesias induced by subthalamotomy unresponsible to NMDA inhibitor amantadine
M. Morrello

P664 High frequency STN stimulation activates associative projection cortices of the basal ganglia and improves memory function in patients with advanced Parkinson’s disease
E. Kalbe, R. Hiler, B. Burpahaus, K. Herholz, J. Kessler, V. Strun

P665 Homocysteine levels and MTHFR C67T genotype in patients with Parkinson’s disease with and without levodopa therapy
E. Dzoljic, I. Novakovic, D. Mirkovic, Z. Todorovic, M. Prostran, V. Kostic

P666 History of obsessive compulsive behavior, younger age of symptoms onset and treatment with dopamine agonists are risk factors for the development of addiction-like behavior in patients with Parkinson’s disease
N. Giladi, N. Weitzman, C. Peretz, H. Shabal, S. Schreiber

P667 Plasma concentrations of fluoxetine and motor signs in patients with Parkinson’s disease
E. Dzoljic, I. Novakovic, D. Mirkovic, Z. Todorovic, M. Prostran, V. Kostic
<table>
<thead>
<tr>
<th>Poster Number</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>P668</td>
<td>Kinematical evaluation of movement after partial and total interruption of basal ganglion output in Parkinson's disease</td>
<td>M. Merello, J. Balej, C. Avelyra, R. Leiguarda</td>
</tr>
<tr>
<td>P669</td>
<td>Quality of life (QoL) in patients with Parkinson's disease (PD)</td>
<td>A.B. Guekht, E.S. Chikina, K.S. Gushkov, A.A. Shpak, E.I. Gusev</td>
</tr>
<tr>
<td>P670</td>
<td>A simple method to assess oxidative stress in subjects with Parkinson's disease</td>
<td>R. Marconi, S. Carapelli, L. Morgante, A. Epifantio, N. Vanacore, G. Meccio</td>
</tr>
<tr>
<td>P671</td>
<td>L-DOPA effects on laryngeal dysfunction in Parkinson's disease: An acoustic and aerodynamic study</td>
<td>F. Viallet, L. Jankowski, A. Purson, B. Teston</td>
</tr>
<tr>
<td>P674</td>
<td>Somnolence and sleep attacks in a small sample of Parkinson's disease patients</td>
<td>G.N. Rizzo</td>
</tr>
<tr>
<td>P676</td>
<td>Comparison of the effects of a self-supervised home exercise program and a physiotherapist-supervised exercise program on gait parameters in a Parkinson’s disease population</td>
<td>V. Lun, N. Pullan, C. Adams, B. Ramage, J. Ronsky, O. Suchowersky</td>
</tr>
<tr>
<td>P677</td>
<td>Bladder dysfunction in patients with Parkinson's disease</td>
<td>M. Kiljako, P. Tab, U. Krikmann, E. Oll</td>
</tr>
<tr>
<td>P678</td>
<td>Gender differences in Parkinson's disease</td>
<td>C.A. Haaxma, M.W. Horstink</td>
</tr>
<tr>
<td>P679</td>
<td>Amyloid peptides and Tau proteins in cerebrospinal fluid of Parkinson patients</td>
<td>S. Haegele, J. Zerr, T. Vogt</td>
</tr>
<tr>
<td>P680</td>
<td>Repetitive TMS is as effective as fluoxetine in the treatment of depression in Parkinson's disease patients</td>
<td>F. Fregni, C.M. Santos, M.A. Marcolin, A. Pascual-Leone, L. Silveira-Moriyama, E.R. Barbosa</td>
</tr>
<tr>
<td>P682</td>
<td>Depression, anxiety and cognitive disorders in patients with Parkinson's disease</td>
<td>O. Ozturk, F. Ozer, L. Hanoglu, H. Meral</td>
</tr>
<tr>
<td>P683</td>
<td>Learned irrelevance revisited: The cognitive basis of attentional set-shifting impairments in Parkinson's disease</td>
<td>A.E. Slaboz, S.J. Lewis, A.M. Owen</td>
</tr>
<tr>
<td>P685</td>
<td>Quantitative digitography scores correlate with unified Parkinsons disease rating scale motor scores and are improved by both medication and bilateral subthalamic deep brain stimulation</td>
<td>A. Taylor Tavares, G.S. Jeffers, G. Fujikami, T. Courtney, B. Hill, H. Bronte-Stewart</td>
</tr>
</tbody>
</table>
Prescribing Information DaTSCAN™ ioflupane (TM)

Refer to full SPC before prescribing. Presentation: Vials containing 185 MBq or 370 MBq ioflupane (123I) at reference time. Uses: Detecting loss of functional dopaminergic neuron terminals in the striatum of patients with clinically uncertain Parkinsonian Syndromes in order to help differentiate Essential Tremor from Parkinsonian Syndromes related to idiopathic Parkinson's Disease (PD), Multiple System Atrophy (MSA), Progressive Supranuclear Palsy (PSP). DaTSCAN is unable to discriminate between PD, MSA and PSP. Dosage and Administration: DaTSCAN is a 5% (v/v) ethanolic solution for intravenous injection and should be used without dilution. Clinical efficiency has been demonstrated across the range of 111-185 MBq do not use outside this range. Appropriate thyroid blocking treatment must be given prior to and post injection of DaTSCAN. SPECT imaging should take place 3-6 hours after injection of DaTSCAN. DaTSCAN is not recommended for use in children or adolescents. For use in patients referred by physicians experienced in the management of movement disorders. To minimise the potential for pain at the injection site during administration, a slow intravenous injection (not less than 15 - 20 seconds) via an arm vein is recommended. See SPC. Contraindications: Pregnancy and in patients with hypersensitivity to iodide or any of the excipients. Precautions: Radiopharmaceuticals should only be used by qualified personnel with appropriate government authorisation and should be prepared using aseptic and radiological precautions. DaTSCAN is not recommended in moderate to severe renal or hepatic impairment. Interactions: Consider current medication. Medicines that bind to the dopamine transporter may interfere with diagnosis; these include amphetamine, benzotropine, bupropion, cocaine, mazindol, methylphenidate, phentermine and sertraline. Drugs shown during clinical trials not to interfere with DaTSCAN imaging include amantadine, benzhexol, buspiron, levodopa, metoprolol, prazepam, propranolol and selegiline. Dopamine agonists and antagonists acting on the postsynaptic dopamine receptors are not expected to interfere with DaTSCAN imaging and can therefore be continued if desired. Pregnancy and Lactation: Contraindicated in pregnancy. Information should be sought about pregnancy from women of child bearing potential. A woman who has missed her period should be assumed to be pregnant. If administration to a breast feeding woman is necessary, substitute formula feeding for breast feeding. Side Effects: No serious adverse effects have been reported. Common side effects include headache, vertigo and increased appetite and formation. Exposure to ionising radiation is linked with cancer induction and a potential for hereditary defects and must be kept as low as reasonably achievable. Intense pain on injection has been reported uncommonly following administration into small veins. Dosimetry: Effective dose from 185 MBq is 4.35 mSv. Overdose: Encourage frequent micturition and defecation. Legal category: Subject to medical prescription (POM). Consult full SPC before prescribing. Further information available on request. Marketing Authorisation numbers: EU/1/00/135/001 and EU/1/00/135/002. Date of Preparation: July 2003. Amersham, Amersham Health and DaTSCAN are trademarks of Amersham plc. © Amersham plc 2003 - All rights reserved. All goods and services are sold subject to the terms and conditions of sale of the company within the Amersham group, which supplies them. A copy of these terms and conditions is available on request. Amersham plc, Amersham Place, Little Chalfont, Buckinghamshire, England HP7 9NA. Job Code: 732

Bird of prey or butterfly?

DaTSCAN™
IOFLUPANE (TM)

The image of objectivity in movement disorder diagnosis

www.amershamhealth.com
©2003 Amersham Health
POSTER SESSION 3

WEDNESDAY, JUNE 16
Poster Viewing: 8:30 am to 5:00 pm
Authors Present Odd Numbers: 11:30 am to 12:30 pm
Authors Present Even Numbers: 4:00 pm to 5:00 pm

Parkinson's disease 2
Poster numbers 695-814

P700 Modulation of GABAergic interneuronal activity in the motor cortex of parkinsonian rats
C. Capper-Loup, J.-M. Burgunder, A. Kaelin-Lang

P701 Homocysteine serum levels and MTHFR C677T genotype in patients with Parkinson's disease, with and without levodopa therapy
E. Dzoljic, I. Novakovic, D. Mirkovic, Z. Todorovic, M. Prostran, V. Kostic

P702 Long-term ambulatory gait monitoring in Parkinson's disease: Validation of a new wireless measurement system
H. Russmann, A. Salarian, K. Aminian, J. Villemure, P.R. Burkhard, F.J. Schindelhuette

P703 Intragranal blockade of nociceptin/orphanin FQ transmission attenuates haloperidol-induced catalepsy in rats
M. Marti, F. Mela, F. Martina, G. Remo, B. Clementina, M. Michele

P704 What are factors associated with dementia in Parkinson's disease?
T. Sato

P705 Acute Akinesia in Parkinson's disease: A concealed syndrome revisited
M. Onofrj, A. Thomas, D. Iacono, A. Luciano, K. Armellino

P706 Suicidal thoughts in patients with Parkinson's disease treated by deep brain stimulation of the subthalamic nuclei: Our experience and meta-analysis of the literature
Y. Balash, D. Merima, N. Giladi

P707 COX-2 is a transcriptional target gene of JNK and induces neurodegeneration in the 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine mouse model of Parkinson disease
S. Hunot, M. Vita, E. Hirsch, S. Przedborski, P. Rakic, R. Flavell

P708 Caspase11 and microglial activation in Parkinson's disease
K. Obi, T. Furuya, H. Mochizuki, H. Akiyama, Y. Mizuno

P709 Oscillatory activity in the subthalamic nucleus (STN) in dyskinetic Parkinson's disease patients (PD)

P710 Mucuna pruriens in Parkinson's disease: A double-blind clinical and pharmacological study
R. Katzenschlager, A. Evans, A. Manson, P. Patsalos, N. Ratnaraj, A.J. Lees

P711 Analyses of the parkin gene in patients with Parkinson's disease who are spared in cardiac sympathetic function in MIBG scintigraphy
M. Yamamoto, H. Ujike, N. Hattori

P712 Confirmation and fine mapping of PARK8 disease locus in a autosomal dominant Parkinson's disease family

P713 Changes in oscillatory activity in the subthalamic nucleus (STN) antedates the developing of tolerance to pulsatile dopaminergic stimulation in Parkinson's disease patients (PD)

P714 Subclinical doses of cabergoline enhance the potency of levodopa
T. Kondo, I. Nakamshi, H. Miwa

P715 Hallucinations in Parkinson's disease: A neuropsychological study in nondemented patients
M. Pellecchia, V. Ravalles, L. Troiano, N. Fragassi, D. Grossi, P. Barone

P716 Action tremor during precision grip in Parkinson's disease
S. Pohle, J. Raethjen, A. Morsnowski, R. Wenzelburger, P. Krack, G. Deuschl

P717 Quality of life (QOL) and pergolide intervention for wearing-off phenomenon in Parkinson's disease
J. Kohmoto, T. Khira, H. Miwa, S. Ooubo, T. Kondo

P718 Analysis of microglia activation in Parkinson disease models
M. Fukuda, K. Yoshihi, T. Furuya, M. Yamada, H. Mochizuki, Y. Mizuno

P719 Subcutaneous apomorphine infusion vs. STN-DBS: Clinical and neuropsychological follow-up at 12 months in patients with complicated PD
A. Antonini, D. De Gaspari, A. Landi, L. Morgante, C. Mariari, G. Pezzoli

P720 4-hydroxynonenal (HNE) enhances alpha-synuclein aggregation
M. Wang, K. Shiba, Y. Chikaoka, N. Hattori, Y. Mizuno

P721 Plasma homocysteine, folate and vitamin B12 levels in patients treated with Parkinson's disease
K. Bayulkem, B. Gurpinar, G. Bayulkem, E. Asantugrul, Y. Yildiz, B. Bayulkem

P722 Reduced dyskinesias with ropinirole in a naturalistic 8.5-year follow-up of patients with early Parkinson's disease (PD) who had initially received ropinirole or L-dopa
O. Rascol, P.P. De Deyn, R.L. Watts, A.D. Korczyn, A.E. Lang, on Behalf of the 170 Study Group

P723 Trigemino-cervical-spinal reflexes in Parkinson's disease
L. Parisi, A. Perrotta, M. Bartolo, L. Valletta, N. Locurato, F. Fattaposta

P724 Quality of life in Indian patients with Parkinson's disease
M. Behari, A.K. Srivastava, R. Pande

P725 Response to apomorphine in early Parkinson's disease
C. Vitale, R. Marconi, M.T. Pellecchia, M. Amboni, V. Bonavita, P. Barone

P726 Continuous apomorphine infusion: Efficacy in patients with advanced Parkinson's disease (PD)
I. Zamarbide, F. Alonso, M.C. Rodriguez Oroz, A. Aristu, J.A. Obeso

P727 Intraputaminal infusion of glial cell line derived neurotrophic factor in Parkinson's disease: A two-year clinical, cognitive, quality of life and 18F-dopa outcome study
N.K. Patel, G.R. Hottot, P. Plaha, M. Bunlage, D.J. Brooks, S.S. Gill

P728 Imaging of dopaminergic dysfunction with [123I]FP-CIT SPECT in early-onset Parkinson's disease
A. Varrone, S. Pappatà, M. Amboni, M. Pellecchia, E. Salvatore, M. Salvatore

P729 Efficacy of combining levodopa with entacapone on activities of daily living and quality of life in parkinsonian patients experiencing 'wearing-off' type complications
H. Reichmann, on Behalf of the ComQol Study Group

P730 Characterization of α-synuclein in human CSF: A biomarker for Parkinson disease?
M.G. Schlossmacher, I. Kahn, L.R. Sudatsky, O. El-Agnaf

P731 Videoscoring - A computerized method for blinded assessment of motor fluctuations and dyskinesias in advanced Parkinson's disease
T. Lawender, O. Sydow, J.-E. Wedlund, M. Maehle-Schmidt, S. Pihlager, D. Nyholm
A retrospective study of seizures in Parkinson’s patients treated with quetiapine

Entacapone, a COMT inhibitor, attenuates the severity of levodopa-induced dyskinesias in hemiparkinsonian rats

A randomized controlled trial of Cognitive Behavioral Therapy (CBT) for carers of patients with Parkinson’s disease

Voluntary and induced steps in Parkinson’s disease, starting from different stance conditions

Stalevo (levodopa/carbidopa/entacapone) provides improved symptom control in fluctuating Parkinson’s disease patients comparable to levodopa/DDC in combination with entacapone

The evolution of dyskinesias after bilateral subthalamotomy for Parkinson’s disease

Dopamine transporter in 150 patients with Parkinson’s disease and disease duration < 5 years: A DaTSCAN/SPECT imaging study

Simultaneous bilateral subthalamotomies in Parkinson’s disease: Neuropsychiatric and neuropsychological aspects

What are the repercussions of sleep apnea syndrome on nocturnal sleep in Parkinson’s disease? A polysomnographic case-control study in 203 patients

Abnormal spatial learning and motor planning in PD may share common bases

Electrophysiological properties of pallidal cells in Parkinson’s disease patients with high and low pre-operative motor scores

Improvement in parkinsonism by STN stimulation depends on electrode placement: Effects of reimplantation

The prevalence of idiopathic Parkinson’s disease and neuroleptic-induced parkinsonism in the general community of South Tyrol: Data from the Brunneck study

2’-Acetylectoside blocks MPP+-induced dopaminergic neuronal death

The relationship of depression to psychomotor symptoms in the Parkinson’s disease

In vitro comparison of BN82451 and Riluzole. In vivo interaction on the loss of dopamine induced by MPTP in mice

A meta-analysis of six prospective studies of falls in Parkinson’s disease

Unilateral deep brain stimulation improves control of bimanual forces in Parkinson’s disease patients

The prevalence of idiopathic Parkinson’s disease and neuroleptic-induced parkinsonism in the general community of South Tyrol: Data from the Brunneck study

Cabergoline versus pergolide in levodopa-treated Parkinson’s disease patients with nocturnal disabilities: A randomised, double-blind crossover trial to evaluate efficacy, tolerability, and quality of life

‘Fast Tapping’ is not a suitable parameter for control of dopaminergic activity of daily living score as marker of Parkinson’s disease

Different clinical characteristics between Parkinson’s disease patients with and without lacunar infarcts of basal ganglia territory

Parkinson’s disease and thyroid dysfunction

UPDRS activity of daily living score as marker of Parkinson’s disease progression
An evaluation of cognitive dysfunction in idiopathic Parkinson’s disease

Effects of nonselective inhibition of glutamate release in advanced Parkinson’s disease
W. Bara-Jimenez, T. Dimitrova, A. Sherzai, T. Chase

Clinical assessment of a lightweight wireless movement disorder monitor

Contribution of step length to walking speed as a clinical marker for Parkinson’s disease
J.-M. Gracies, W. Tse, D. Crisan, L. Guo, R. Kahoud, W. Koller

Statistical studies in design of Phase II futility studies in Parkinson’s disease (PD)
J. Elm, B.C. Tilley, P. Huang, K. Kieburtz, B. Ravina, C. Goetz, Y. Palesch, C. Kamp, P. Guimarães, K. Shannon, F. Wooten, C. Tanner

Total body lead burden and the risk of Parkinson’s disease
J.M. Gorell, S. Coon, E.L. Peterson, A. Gio, J.G.S. Pounds, D.R. Chettle

Functional studies of monozygotic twin discordant for Parkinson’s disease
X. Huang, P. Chen, B. Vaughn, S. Ford, A. Troster, A. Belger

Dopamine agonists can be highly effective antiparkinsonian drugs without inducing tolerance
R.B. Mailman, K. Netzl, D.E. Nichols, S. Southenland

Orthopedic surgery in patients with Parkinson’s disease - Postoperative complications and discharge destinations
K.A. Smaily, R. Tinther

Postoperative delirium in patients with Parkinson’s disease (PD) undergoing surgical procedures
K.A. Smaily, R. Tinther

Occulo-Jaw synkinesia in Parkinson’s disease and MSA-p
G.J. Salazar, R.J. Wix, J. Monnells, J. Valls, E. Tolosa

Antagonist inhibition prior to and during voluntary agonist contractions is impaired in Parkinson’s disease
J. van Vught, M. Stijl, J. van Dijk

Mitochondrial dysfunction and oxidative damage in parkin-deficient mice
J.J. Palacino, D. Snyder, M.S. Goldberg, S. Krauss, C. Motz, J. Klose

Safety following a single subcutaneous injection of apomorphine in Parkinson’s disease
J. van Vught, M. Stijl, J. van Dijk

Presence of an AP0E4 allele results in significantly earlier onset of Parkinson’s disease
N. Pankratz, L. Byder, C. Halter, A. Rudolph, C.W. Shults, P.M. Conneally

Novel dopamine releasing response of an anti-convulsant agent with possible anti-Parkinson’s activity
M.R. Guick, L.A. Santana, H. Granson, M.D. Yahr

Effects of controlled-release L-Dopa (NACOM® Retard/SinemetTM CR) on sleep, motor fluctuations and quality of life in patients with Parkinson’s disease
S. Happe, M. Kungel, B. Jeff, M. Donna

Safety and efficacy of rivastigmine in Parkinson’s disease with dementia, a retrospective review
S.M. Farris, M.L. Giroux, J.L. Vitek

High dosage of pergolide in Parkinson’s disease
F. Kuzilay, S. Ozkaynak

D2 stimulation may worsen bladder over-activity in untreated Parkinson’s disease patients, while D1 stimulation may restore it. Difference between acute and chronic stimulation
A. Pisani, L. Brusa, S. Galati, P. Stanzione, F. Petta, E. Finuzzi Agrò

L-Dopa dependence in a young-adult patient with Parkinson’s disease
P. Iseri, K. Bayulkem, H. Efendi, T. Tokay, G. Karabas, I. Anik

Comparison of the impact of speech difficulties and pragmatic difficulties in everyday life in patients with Parkinson’s disease
N. Karapatiou, A. Sarafianos, E. Karageorgiou, C.E. Karageorgiou

Possibilities of Bourdon’s vigilance test modification and driving ability in people with Parkinson’s disease
J. Svatoš, K. Humhal

Anticipatory postural adjustments during shoulder flexion in Parkinson’s disease
S. Bleuse, F. Cassim, J.-L. Blatt, A. Deste, P. Derambure, J.-D. Guieu

Peripheral biomarkers of Parkinson’s disease
A.W. Michell, L. Luheishi, D. Fritz, R.H. Carpenter, M.G. Spillantini, R.A. Barker

Case-only study of interactions between genetic polymorphisms of GSTM1, P1, T1 and Z1 and smoking in Parkinson’s disease

Effects of deep brain stimulation of the subthalamic nucleus on oculocephalic movements in Parkinson’s disease
P. Sauleau, C. Tilikete, D. Pelisson, V. Alain, K. Paul, P. Pierre

What is the role of the subthalamic nucleus in gaze orientation?
P. Sauleau, P. Krack, C. Tilikete, D. Pelisson, A. Vighetto, A.L. Benabid

Experimental studies and clinical results of staged lesions through DBS electrodes
S. Raoul, D. Leduc, M. Faighel, M. Verin, Y. Lajet, P. Damier

Bioavailability of a dopamine receptor agonist, cabergoline increases through drug interaction with clarithromycin, a macrolide
M. Nomoto, M. Nagai, A. Nakatsuka, H. Yabe, T. Montoyo, A. Moritoyo

Prevalence of fibromyalgia syndrome in patients with Parkinson’s disease
H.A. Teive, M.D. Scafati, E.S. Paiva, A.R. Troiano, R.P. Munhoz, L.C. Werneck

Ropinirole versus pergolide as adjunctive therapy to levodopa in Parkinson’s disease
Z. Ural, E. Boylu, S. Orhan

Gyrokinetics: A preventive rehabilitation program in Parkinson’s disease
M.H. Anca

A double-blind, randomized trial of Tegaserod (Zelnorm) for the treatment of constipation in Parkinson’s disease

A population-based study of clinical features in early Parkinsons disease
B. Ritz, K. Gail, B. Jeff, M. Donna

Brain energy metabolism in Parkinson’s disease studied with magnetic resonance spectroscopy
W. Martin, M. Wieler, C. Hanstock

Dopamine-related behavioral disorders in Parkinson’s disease
J.S. Hui, M.F. Lew

Early combination of domperidone with pergolide allows quick titration of pergolide dose in the treatment of Parkinson’s disease
N.O. Subutay, M.F. Oztekin

The effectiveness of pergolide and cabergoline as an adjunct to levodopa in Parkinson’s disease
N.O. Subutay, M.F. Oztekin

Pergolide monotherapy in the treatment of early PD: Results of a 3 year follow up of a randomized controlled study
N.O. Subutay, M.F. Oztekin

The effect of pergolide and piribedil on parkinsonian tremor in patients with early Parkinson’s disease
N.O. Subutay, M.F. Oztekin, D. Korucu

Ropinirole, a non-ergoline dopamine agonist in the treatment of early and late stage SOF Parkinson’s disease: Preliminary results
N.O. Subutay, M.F. Oztekin, F. Dagdelen
P814 Continued effect of intermittent subcutaneous apomorphine following long-term use in patients with advanced Parkinson’s disease
D.F. Pfeiffer, the APO-302 Investigators

Surgical Therapy
Poster numbers 815-948

P815 Subthalamic nucleus stimulation in Parkinson’s disease patients intolerant to levodopa therapy
K.E. Lyons, S.B. Wilkinson, R. Pahwa

P816 The impact of STN stimulation on brainstem excitability in parkinsonian patients
M. Püitter, F. Kopper, R. Wenzelburger, G. Deuschl, J. Volkmann

P817 PC-based deep brain recording system for stereotactic and functional neurosurgery

P818 Deep brain stimulation in a patient on immunosuppressive therapy after renal transplant
A. Samii, J.C. Slimp, R. Goodkin

P819 Unilateral subthalamic nucleus deep brain stimulation contralateral to thalamic stimulation in Parkinson’s disease
A. Samii, J.C. Slimp, R. Goodkin

P820 Methodological concepts in subthalamic nucleus targeting: Controversies referring to deep brain stimulation (DBS) / neural transplantation
S.G. Echebarria

P821 Effect of high frequency stimulation of the subthalamic nucleus on extracellular glutamate and GABA in substantia nigra pars reticulata of freely moving hemiparkinsonian rats
S. Boulet, E. Lacombe, C. Carcenac, A. Bertrand, A. Poupard, M. Savasta

P822 Predictive value of the Florida Surgical Questionnaire for Parkinson’s disease (FLASQ-PD)
K.D. Foote, H.H. Fernandez, P. Seignourel, M.S. Okun

P823 New treatment paradigm in dystonic movement disorders: Multifocal deep brain stimulation
J.K. Krauss, H.H. Capelle, C. Blahak, H. Bäzner, R. Weigel, J.C. Wöhrle

P824 Deep brain stimulation for distressful belching
E. Cuny, A. Rougier, A. Benazzouz, I. Sibton, I. Gorayeb, P. Burbaud

P825 Subthalamic nucleus deep brain stimulation for Parkinson’s disease using magnetic resonance images for localization with and without microelectrode recording – a comparative study of outcome
S. Chen, Y. Chou, S. Lin, Y. Hsin, S. Lin, C. Lee

P826 Correlation between the patient’s ability to perform motor tasks, their perception of this ability, their mood and affect, and the relationship of these with levodopa and deep brain stimulation in Parkinson’s disease
C.A. Joint, T.Z. Aziz, D. Shamley, R.B. Scott, C. Fletcher, D. Foxcroft

P827 Effect of propofol anesthesia on the firing pattern of GPe neurons in generalized dystonia
F.S. Steigerwald, F. Kopper, J. Herzog, J. Volkmann, H.M. Mehdorn, G. Deuschl

P828 Effects of stereotactic neurosurgery on postural instability and gait in Parkinson’s disease: a systematic review
M. Bakker, R.A. Esselink, M. Munneke, P. Limousin-Dowsey, H.D. Speelman, B.R. Bloem

P829 Subthalamic nucleus deep brain stimulation effect in elderly patients with Parkinson’s disease
F. Ory, C. Brefel-Courbon, P. Chaynes, M. Simonetta-Moreau, Y. Lazarthes, O. Rascol

P830 Improved motor responding, but central slowing, after bilateral subthalamic nucleus stimulation in patients with Parkinson’s disease

P831 Spinal cord stimulation in patients with primary orthostatic tremor
J.K. Krauss, H.H. Capelle, C. Blahak, H. Bäzner, R. Weigel, J.C. Wöhrle

P832 Quality control procedure for stereotactic magnetic resonance imaging during neurosurgery of movement disorders
N. Vayssiere, H. El Fertit, L. Cif, S. Hemm, P. Coubes

P833 Treatment of Parkinson’s disease by deep brain stimulation: Evaluation of an MRI-based surgery under general anesthesia
N. Vayssiere, G. Guarrigues, L. Cif, S. Hemm, P. Coubes

P834 Apomorphine continuous subcutaneous infusion and bilateral subthalamic stimulation in the treatment of advanced Parkinson’s disease: A pilot comparative study
M. Pillen, M. Marti, F. Valdecoretia, E. Tolosa, O. Morsi, M. Alegret

P835 Lewy body dementia in a patient with Parkinson’s disease developing cognitive changes while under subthalamic stimulation: A clinicopathologic study
M. Alegret, F. Valdecoretia, E. Tolosa, M. Rey, J. Rumià, M. Pillar

P836 Bilateral STN stimulation in PD leads to a decrease in mental speed
H.M. Smeding, B. Schmand, J.D. Speelman

P837 Comparative effects of unilateral STN vs. GPI DBS on movement time, dexterity, and reaction time

P838 Pseudobulbar crying spell during microelectrode recording of the GPe in a patient with Parkinson’s disease
D.P. Wint, K.D. Foote, M.S. Okun

P839 Deep brain stimulation of the GPI treats restless legs syndrome associated with dystonia: Report of a case
M.S. Okun, H.H. Fernandez, K.D. Foote

P840 Rapid reappearance of tremor after discontinuation of subthalamic deep brain stimulation in Parkinson’s disease — evidence for a direct neurotransmission interference

P841 An audit of the incidence and types of epilepsy occurring after deep brain stimulation for dystonia

P842 Different improvement of signs of Parkinson’s disease after 1 year of subthalamic stimulation
S.A. Nassetti, F. Volzania, C. Sturiale, A. Tropeani, A. Andreoli, C.A. Tassinari

P843 Only physical aspects of quality of life are significantly improved by bilateral subthalamic stimulation in Parkinson’s disease
S. Drapier, P. Sauleau, D. Drapier, S. Raoul, E. Leray, M. Verin

P844 Chronic bilateral subthalamic nucleus stimulation in advanced Parkinson’s disease: Computerized gait analysis at 3 months and at 1 year postoperatively
H. Baezner, E. Grips, C. Blahak, R. Weigel, J.K. Krauss, J.C. Wöhrle

P845 Acute effects of L-dopa and subthalamic stimulation on depression and hedonic tone in Parkinson’s disease
C. Daniels, K. Witt, J. Reiff, J. Herzog, D. Lorenz, J. Volkmann

P846 Fear recognition is impaired by subthalamic nucleus stimulation in Parkinson’s disease
I. Biseul, S. Drapier, P. Sauleau, J. Rivier, F. Lallement, M. Verin

P847 On demand deep brain stimulation for essential tremor: An approach to avoid toleration?
M. Kronenbuerger, C. Fromm, V.A. Coenen, I. Rohde, V. Rohde

P848 Pallidal neuronal activity in generalized dystonia
L. Hinz, F. Steigerwald, U. Fietzek, H. Mehdorn, G. Deuschl, J. Volkmann

P849 Reversible catatonia/catalepsy and subthalamic deep brain stimulation (STN DBS) in Parkinson’s disease (PD)
S.A. Nassetti, F. Valzania, C. Sturiale, A. Tropeani, A. Andreoli, C.A. Tassinari

P850 Bilateral stimulation of the subthalamic nucleus (STN) in Parkinson’s disease (PD): A long-term follow up of non-surgical, non-reversible clinical complications in 117 patients
C. van der Linden, H. Colle
POSTER SESSION 3

P851 Unilateral deep-brain stimulation of the subthalamic nucleus (STN-DBS) in Parkinson’s disease (PD): Correlation of clinical results with electrode position
M. Mata, J.J. Lopez Lozano, G. Rey, R. Martinez, G. Bravo, J. Burzaco

P852 Effects of different parameter settings on the intelligibility of speech in patients with Parkinson’s disease treated with deep brain stimulation in the subthalamic nuclei
A.-L. Törnqvist, L. Schälen, S. Rehncrona

P853 Are complications less common in deep brain stimulation than in ablative procedures for movement disorders?
P. Blomstedt, M.I. Hariz

P854 The role of the surgical movement disorder nurse specialist
C.A. Joint, R. Stross, G. Mallon, K. O’Sullivan

P855 Gpi DBS has only moderate benefit for mixed involuntary movements after thalamic stroke
D. Apetauerova, P. Barlow, K. Hreib, J. Shils, J. Arle

P856 Long-term changes of subthalamic nucleus (STN) deep brain stimulation (DBS) parameters in PD patients
A. Beric, D. Steric, C. Draff, P. Taverna, M. Xu, P.J. Kelly

P857 Neuropsychological outcome of bilateral pallidal stimulation in dystonia

P858 Intraoperative MR-imaging to confirm DBS lead placement prior to fixation
S.E. Kralh, R.V. Patwardhan, A. Pedrosa, E.J. Behnke, A.A. DeSalles

P859 Impact on mood of subthalamic nucleus stimulation in patients with Parkinson disease

P860 One year follow-up of a randomized multicenter trial comparing unilateral pallidotomy and bilateral subthalamic nucleus stimulation in Parkinson’s disease
R.A. Esselink, R.M. de Bie, R.J. de Haan, R.P. Schuurman, A.D. Bosch, J.D. Speelman

P861 Subthalamic nucleus deep brain stimulation restores afferent inhibition in Parkinson’s disease
A. Sailer, D.I. Cunic, M. Elena, A.E. Lang, A.M. Lozano, R. Chen

P862 Deep brain subthalamic stimulation in Parkinson’s disease: Effect of the age

P863 High incidence of osteo-articular complications after STN DBS in Parkinson’s disease
C. Wider, J. Ghika, J.-G. Villemure, P. Burkhard, J. Bogousslavsky, F.J. Vingerhoets

P864 Differential effects of different frequencies of stimulation of the subthalamic nucleus in treated Parkinson’s disease
N. Fogelson, A.A. Kuhn, P. Silberstein, P. Dowsey Limousin, M. Hariz, T. Trottenberg

P865 Post-operative progress of severe tardive dystonia and dyskinesia following globus pallidus internus deep brain stimulation
T. Trottenberg, J. Volkman, G. Deuschl, B. Schrader, G.H. Schneider, A. Kupsch

P866 Non-microelectrode guided deep brain stimulation of the subthalamic nucleus: Safety and long-term efficacy
N. Allert, J. Volkman, C. Dohle, S. Kelm, J. Voge, R. Lehrek

P867 The acute cardiovascular and respiratory effects of deep brain stimulation (DBS)
P. Guaraldi, G. Barletta, D. Gimaldi, G. Pierangeli, P. Cortelli

P868 Effect of STN stimulation on perceptual and acoustic assessments of dysarthria in patients with Parkinson’s disease: Preliminary results
S. Pinto, E. Tripoliti, P. Silberstein, P. Limousin-Dowsey, M. Hariz, J. Rothwell

P869 Deep brain stimulation of the STN activates the electrode target area in patients with advanced Parkinson’s disease
R. Hilker, J. Voge, L. Burghaus, M. Maarouf, A. Koulousakis, K. Herholz

P870 Is bilateral stimulation of the subthalamic nucleus less effective in Parkinson’s disease when procedure is done under general anesthesia? A prospective study of 75 patients

P871 Long-term outcomes of bilateral stimulation of the subthalamic nucleus in patients with advanced Parkinson’s disease
G.S. Liang, K.L. Choo, J.L. Jaggi, C. Loveland-Jones, L. Leng, A.D. Siderowf

P872 Effects of STN DBS in post pallidotomy patients: Clinical and neuropsychological results
J.L. Shils, M. Tagliati, A. Koss, R.L. Alterman

P873 Non-Invasive experimental and clinical DBS lead/extension failure testing
J.L. Shils, M. Tagliati, R.L. Alterman

P874 DBS electrode contact and stimulation frequency effect on parkinsonian symptoms

P875 Frameless placement of deep brain stimulation electrodes: An accuracy study
J.M. Henderson, K.L. Holloway, S.E. Gaede, J.M. Rosenow, A. Casvoy

P876 Effects of GPi stimulation on perceptual and acoustical features of dysarthria in patients with generalized dystonia: Preliminary results
E. Tripoliti, S. Pinto, S. Tisch, P. Limousin-Dowsey, M. Hariz, J. Rothwell

P877 The role of the subthalamic nucleus in language processing: Microelectrode recordings prior to the implantation of deep brain stimulation electrodes for people with Parkinson’s disease
J.E. Castner, H.J. Chenery, D.A. Copland, P.A. Silburn

P878 Oculomotor sub-region within the STN: Evidences from DBS in PD
A. Carruzzo, C. Pollo, J.A. Ghika, J. Bogousslavsky, J.-G. Villemure, F.J. Vingerhoets

P879 Modulation of executive functions by frequency settings in subthalamic deep brain stimulation
L. Wojtecki, L. Timmermann, S. Joergens, M. Suedmeyer, V. Sturm, A. Schnitzler

P880 Deep brain stimulation for Parkinson’s disease: Assessment after thirteen cases
M. Rosas, A. Mendes, P. Linhares, M. Basto, R. Fonseca, R. Vaz

P881 The additive effect of subthalamic nucleus stimulation and medication on motor scores in Parkinson’s disease

P882 The ultrastructural analysis of the surface of explanted deep brain stimulation electrodes with scanning and transmission electron microscopy
J. Moss, T.A. Ryder, T.Z. Aziz, M.B. Graeber, P.G. Bain

P883 Long-term result of treatment for essential tremor with stimulation of the subthalamic nucleus: Case studies
G. Lind, C. Lind, J. Winter, B.A. Meyerson, B. Linderoth

P884 Mechanisms of body weight gain in parkinsonian patients after subthalamic stimulation: Implication of changes in energy expenditure
C. Montorier, S. Banner, P. Derost, Y. Borrie, B. Morio, F. Dufour

P885 Stimulation of the thalamic ventralis intermedius nucleus (VIM) improves main components of ataxia in multiple sclerosis patients
J. Spiegel, G. Fuss, J.R. Moringlaine, U. Dillmann

P886 Randomized double-blind evaluation of unilateral deep brain stimulation of the subthalamic nucleus
L. Verhagen Metman, C.C. Goetz, B.C. Myre, J.M. Arzbacher, N.A. Verweij, R.A. Bakay

P887 Bilateral globus pallidus stimulation for Huntington’s disease: Importance of frequency on the clinical benefit
E. Moro, A.E. Lang, Y-Y.W. Poon, A. Tokcaer, N. Mahant, S. Hung

P888 Subthalamic nucleus deep brain stimulation is effective for disabling dyskinesia, but does not improve early morning painful dystonia in Parkinson’s patients
D. Apetauerova, S. Lamont, P. Barlow, J. Shils, J. Arle
<table>
<thead>
<tr>
<th>Poster Number</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>P890</td>
<td>Subthalamic nucleus deep brain stimulation with or without microelec-</td>
<td>Y.C. Chou, S.Y. Chen, S.H. Lin, S.Z. Lin</td>
</tr>
<tr>
<td></td>
<td>trode recording - Complications analysis in two groups.</td>
<td></td>
</tr>
<tr>
<td>P890</td>
<td>Unusual observations following subthalamic nucleus stimulation.</td>
<td>P.K. Doshi, N.A. Chhaya, M.H. Bhatt</td>
</tr>
<tr>
<td>P891</td>
<td>Conscious sedation vs. local anaesthesia in deep brain stimulation</td>
<td>A. Mariscal, J.C. Martinez-Castillo</td>
</tr>
<tr>
<td></td>
<td>surgery for Parkinson’s disease.</td>
<td></td>
</tr>
<tr>
<td>P892</td>
<td>Two year follow-up of bilateral subthalamic nucleus stimulation in</td>
<td>N.A. Chhaya, P.K. Doshi, S.R. Vaidya, M.H. Bhatt</td>
</tr>
<tr>
<td></td>
<td>Parkinson’s disease.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>localization of the exact target.</td>
<td></td>
</tr>
<tr>
<td>P894</td>
<td>Neuronal activity of zona incerta in Parkinson’s disease patients.</td>
<td>M. Merello, E. Tenca, D. Cerquetti</td>
</tr>
<tr>
<td></td>
<td>and other movement disorders.</td>
<td></td>
</tr>
<tr>
<td>P896</td>
<td>Stimulation parameters’ relationship to stimulation effect in deep</td>
<td>S.E. Cooper, A.M. Kuncel, J. Henderson, A. Rezai, E.B. Montgomery, W.M. Grill</td>
</tr>
<tr>
<td></td>
<td>brain stimulation of the thalamus.</td>
<td></td>
</tr>
<tr>
<td>P897</td>
<td>Age is not an independent factor influencing the short-term outcome</td>
<td>S. Lin, S. Chen, S. Lin, Y. Chou, C. Lee</td>
</tr>
<tr>
<td></td>
<td>in Parkinsonian patients treated with deep brain stimulation of the</td>
<td></td>
</tr>
<tr>
<td></td>
<td>subthalamic nucleus.</td>
<td></td>
</tr>
<tr>
<td>P898</td>
<td>How is the impedance of electrodes used for microelectrode recording</td>
<td>K. Ashkan, A. Batir, B.A. Wallace, P. Pollak, A.L. Benabid</td>
</tr>
<tr>
<td></td>
<td>related to the outcome of deep brain stimulation surgery for</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Parkinson’s disease?</td>
<td></td>
</tr>
<tr>
<td>P899</td>
<td>Retrospective comparison of the efficacy and costs of STN-DBS and</td>
<td>T. van Laar, L. Werdelin</td>
</tr>
<tr>
<td></td>
<td>continuous subcutaneous infusion of apomorphine in patients with</td>
<td></td>
</tr>
<tr>
<td></td>
<td>advanced Parkinson’s disease.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>of the French multicentric study STARDYS</td>
<td></td>
</tr>
<tr>
<td></td>
<td>stimulation for Parkinson’s disease.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>subthalamic nucleus (STN) deep brain stimulation (DBS)</td>
<td></td>
</tr>
<tr>
<td>P903</td>
<td>Do changes in deep brain stimulation parameters affect mood and</td>
<td>C. Siri, J. Green, J.L. Vitek, M. Haber, M.R. Delong</td>
</tr>
<tr>
<td></td>
<td>mental function in patients with Parkinson’s disease?</td>
<td></td>
</tr>
<tr>
<td>P904</td>
<td>Bilateral chronic high frequency subthalamic stimulation in</td>
<td>L.M. Romito, M.F. Contarino, C. Marnas, A. Franzini, M. Scerrati, A. Albanese</td>
</tr>
<tr>
<td></td>
<td>Parkinson’s disease: Long-term neurological follow-up</td>
<td></td>
</tr>
<tr>
<td>P905</td>
<td>Management of hemidystonia with deep brain stimulation</td>
<td>J. Espinosa, M. Rueda, W. Fernandez, G.J. Arango, E. Ruiz</td>
</tr>
<tr>
<td>P906</td>
<td>Surgical management of Parkinson’s disease. Deep brain stimulation</td>
<td>G.J. Arango, W. Fernandez, M. Rueda, E. Jairo</td>
</tr>
<tr>
<td></td>
<td>of the prelemninal radiations</td>
<td></td>
</tr>
<tr>
<td>P907</td>
<td>Neuropsychological outcome of the deep brain stimulation of the</td>
<td>R. Fukatsu, T. Nimura, T. Ando, T. Okawa, H. Saito, T. Fuji</td>
</tr>
<tr>
<td></td>
<td>subthalamic nucleus in patients with Parkinson’s disease</td>
<td></td>
</tr>
<tr>
<td>P908</td>
<td>Relief of hemiballism with ventral subthalamic stimulation</td>
<td>V.L. Wheelock, C.T. Pappas, J. Scanlon, K.A. Sigvardt</td>
</tr>
<tr>
<td>P909</td>
<td>Pathological crying induced by deep brain stimulation: A case report</td>
<td>L. Wölfecki, J. Nickel, L. Timmermann, R. Seitz, V. Sturm, A. Schnitzler</td>
</tr>
<tr>
<td>P910</td>
<td>Most effective stimulation site for severe intention tremor</td>
<td>J. Herzog, W. Hamel, R. Wenzelburger, H.M. Mehdorn, J. Volkmann, G. Deuschl</td>
</tr>
<tr>
<td>P911</td>
<td>Bilateral pallidal stimulation in medically refractory tardive cervical</td>
<td>M. Rinnerthaler, J. Mueller, K. Kalteis, F. Alesch, W. Poewe</td>
</tr>
<tr>
<td></td>
<td>Parkinson’s disease: A retrospective study of 25 patients treated</td>
<td></td>
</tr>
<tr>
<td></td>
<td>between 1998 and 2003</td>
<td></td>
</tr>
<tr>
<td>P913</td>
<td>Is the neurophysiological intraoperative monitoring giving a better</td>
<td>L. Bartolomei, M. Miacintino, G. Nordera, F. Colombo, V. Toso</td>
</tr>
<tr>
<td></td>
<td>outcome in DBS therapy for Parkinson’s disease?: Our experience in 31</td>
<td></td>
</tr>
<tr>
<td></td>
<td>patients</td>
<td></td>
</tr>
<tr>
<td>P914</td>
<td>The efficacy of STN-DBS in advanced Parkinson’s disease based on</td>
<td>E. Wolf, G. Wenning, W. Eisner, J. Müller, W. Poewe</td>
</tr>
<tr>
<td></td>
<td>patient diaries and motor scores: 1- year follow-up data</td>
<td></td>
</tr>
<tr>
<td>P915</td>
<td>Tremor induction by unilateral STN stimulation in Parkinson’s disease</td>
<td>N. Galvez-Jimenez, M. Hargrave, S. Nair</td>
</tr>
<tr>
<td>P916</td>
<td>Deep brain stimulation (DBS) may be effective for dystonia. Six</td>
<td>P.R. Burkhard, F.J. Vingerhoets, A. Berney, J. Bogousslavsky, J.-G. Villemure, J. Ghika</td>
</tr>
<tr>
<td></td>
<td>month follow up</td>
<td></td>
</tr>
<tr>
<td>P917</td>
<td>Death by suicide after deep brain stimulation</td>
<td>F. Tamma, E. Caputo, G. Ardolino, M. Egidi, A. Prior, P. Rampini</td>
</tr>
<tr>
<td>P918</td>
<td>Age is not an independent factor influencing the short-term outcome</td>
<td></td>
</tr>
<tr>
<td></td>
<td>in Parkinsonian patients treated with deep brain stimulation of the</td>
<td></td>
</tr>
<tr>
<td></td>
<td>subthalamic nucleus.</td>
<td></td>
</tr>
<tr>
<td>P919</td>
<td>Pallidal surgery for craniocervical dystonia (Meige’s syndrome)</td>
<td></td>
</tr>
<tr>
<td>P920</td>
<td>Back pain in patients with Parkinson’s disease: A mini-invasive</td>
<td></td>
</tr>
<tr>
<td></td>
<td>study of bilateral subthalamic nucleus deep brain stimulation in</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Parkinson’s disease: Results of the French SPARK Study Group</td>
<td></td>
</tr>
<tr>
<td>P921</td>
<td>Low risk of major surgical complications with a minimally invasive</td>
<td></td>
</tr>
<tr>
<td></td>
<td>approach with intraoperative electrophysiologic mapping in</td>
<td></td>
</tr>
<tr>
<td></td>
<td>bilateral STN stimulation for PD</td>
<td></td>
</tr>
<tr>
<td>P922</td>
<td>Bilateral pallidal stimulation in medically refractory tardive cervical</td>
<td></td>
</tr>
<tr>
<td></td>
<td>dyskinesia: Preliminary report of the French multicentric study</td>
<td></td>
</tr>
<tr>
<td></td>
<td>STARDYS</td>
<td></td>
</tr>
<tr>
<td>P923</td>
<td>Effect of stimulation of subthalamic nucleus on parkinsonian voice:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A spectroscopic and videolarystroscopic study</td>
<td></td>
</tr>
<tr>
<td>P924</td>
<td>Definitive effects of 10 Hz STN stimulation on motor symptoms in</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Parkinson disease</td>
<td></td>
</tr>
<tr>
<td>P925</td>
<td>Pathological crying induced by deep brain stimulation: A case report</td>
<td>L. Timmermann, L. Wölfecki, J. Gross, J. Voges, V. Sturm, A. Schnitzler</td>
</tr>
<tr>
<td>P926</td>
<td>Most effective stimulation site for severe intention tremor</td>
<td></td>
</tr>
<tr>
<td></td>
<td>J. Herzog, W. Hamel, R. Wenzelburger, H.M. Mehdorn, J. Volkmann, G.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Deuschl</td>
<td></td>
</tr>
<tr>
<td>P927</td>
<td>The effects of pallidotomy on motor function in MPTP-treated,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>D-OPA primed common marmosets</td>
<td></td>
</tr>
<tr>
<td>P928</td>
<td>The anatomic specificity of rest tremor suppression</td>
<td></td>
</tr>
<tr>
<td></td>
<td>T.L. Davis, P.D. Charles, C. Kao, J.Y. Fang, G.M. Fenichel, P.E. Konrad</td>
<td></td>
</tr>
</tbody>
</table>
POSTER SESSION 3

P929 A comparison of short-term and long-term effects of deep brain stimulation on quality of life in patients with Parkinson's disease
A. Siderowf, C. Loveland-Jones, L. Leng, G. Liang, M. Stern, G. Kleiner-Fisman

P930 Failed subthalamic stimulation in Parkinson's disease: Can we still interfere?
B.-F.W. Beljani, M.G. Jabr, G. Nohra, K.G. Habib

P931 Percutaneous radiofrequency facial nerve neurectomy, selective facial neurectomy, blepharoplasty and elevation of eyebrows for treatment of facial dyskinesias

P932 Anatomic locus for induction and suppression of dyskinesia in Parkinson's disease patients treated with subthalamic nucleus deep brain stimulation

P933 Long-term effects of bilateral subthalamic nucleus and globus pallidus deep brain stimulation on gait velocity, stride length, and kinematics in patients with Parkinson's disease
M.S. Piper, M.E. Melnick, P.A. Starr, C.W. Christine, W.J. Marks, Jr.

P934 Neuropsychological functioning after staged bilateral pallidal or subthalamic nucleus deep brain stimulation for Parkinson's disease

P935 Long-term efficacy of pallidal DBS for treatment of medically refractory dystonia
M. Tagliati, J. Miravitlles, J.L. Shils, S.B. Bressman, R. Saunders-Pullman, R. Alterman

P936 Improvement of post-ischemic hemidystonia with low-frequency subthalamic deep brain stimulation
M. Tagliati, J. Miravitlles, J.L. Shils, A. Koss, R.L. Alterman

P937 Parkinson's disease surgery clinical outcomes and complications, one year follow up: Venezuelan experience
G.J. Salazar, R.J. Wix, J.C. Jimenez, R.J. Weiser, S. Starosta, E. Toloza

P938 The influence of subthalamic nucleus deep brain stimulation on psychological and somatic symptoms and distress in patients with Parkinson's disease
K. Kalteis, H. Standhardt, I. Kryspin-Exner, F. Alesch

P939 The 2003 “census” of the Italian group on “deep brain stimulation”: The questionnaire results
R. Eleopra, L. Lopiano, A. Priori, Italian DBS Group

P940 Deep brain stimulation (DBS) treatment for dystonia: A neurophysiological intraoperative monitoring study
M. Sensi, R. Eleopra, M. Cavollo, R. Schivalocchi, F. Dalpozzo, R. Quatrale

P941 Suicide risk in patients with Parkinson's disease undergoing subthalamic stimulation
V. Voon, J.A. Saint-Cyr, A.M. Lozano, E. Moro, K. Dujardin, A.E. Lang

P942 Side effects of subthalamic deep brain stimulation for Parkinson's disease
A. Maertens de Noordhout, V. Delvaux, M. Gonce, J.-M. Remacle, M. Vuchot

P943 Deep brain stimulation (DBS) of the subthalamic nucleus (STN) and thalamic ischemia: A report of two cases
J.P. Sutton

P944 DBS electrode electric field potentials: Calculated solutions and implications
J.E. Arle, L. Mei

P945 Ex-vivo gene therapy with modified retinal pigment epithelial cells without attachment to microcarriers for parkinsonism
T. Subramanian, K. Venkiteswaran, P. Redman, E. Gilbert

P946 Ipsilateral hyperhidrosis as a side effect of subthalamic deep brain stimulation
A. Koss, M. Tagliati, J.L. Shils, R.L. Alterman

P947 Predicting success after deep brain stimulation placement in the subthalamic nucleus in Parkinson's disease patients

P948 Assessing subjective improvement and disability in patients with dystonia of the neck in generalized dystonic syndromes treated with botulinum toxin followed by deep brain stimulation
S. Jain, T. Subramanian

Parkinsonism - Other
Poster numbers 949-1016

P949 Diffuse Lewy Body disease with late onset of parkinsonian syndrome
A.A. Dalla Libera, F.F. Dal Sasso

P950 Sonographic assessment of urinary retention in MSA and idiopathic Parkinson's disease
K. Hahn, G. Ebersbach

P951 Reversible parkinsonism associated with homochromatosis
S. Dethy, J.-M. Caroyer

P952 Idiopathic “cautious” gait disorder of the elderly: Effects of reducing fear of falling
M. Hadar-Frumer, N. Giladi, J.M. Hausdorff

P953 Lewy body-related α-synuclein pathology in aging human brain
K.A. Jellinger

P954 Parkinsonism signs in older people in the community and risk of incident dementia: A prospective longitudinal population-based study
E.D. Louis, M.X. Tang, R. Mayeux

P955 Characteristics of two distinct clinical phenotypes observed in pathologically proven progressive supranuclear palsy: Richardson's syndrome and PSP-Parkinsonism
D.R. Williams, D.C. Paviour, H.C. Watt, A.J. Lees

P956 Reversible parkinsonism following hyponatremia
S.R. Vaidya, M.H. Bhatt

P957 Reversible parkinsonism following acute liver failure

P958 Association of parkinsonian signs with substantia nigra neuron density in deceased older men without Parkinson's disease

P959 Parkinsonian syndrome associated with gluten sensitivity
J.-P. Azulay, T. Witjas, S. Attarian, A. Ali-Chérif, J. Pouget

P960 Reduction of L-dopa(123I)-FP-CIT SPECT imaging of dopamine transporters in patients with PSP without evident signs of parkinsonism
O. Morsi, F. Valideirolea, M. Pillari, E. Toloza, M. Marti, F. Lomena

P961 Paraneoplastic parkinsonism mimicking progressive supranuclear palsy
J.-H. Tan, P.A. Tambyah, B.-C. Goh, E. Wilder-Smith

P962 Hemiparkinsonism and levodopa induced dyskinesias following focal nigral lesion resolved after VIM thalamotomy
E. Ruizica, D. Urgosik, J. Roth, R. Jech, J. Vymazal, P. Mecir

P963 Dementia with Lewy bodies and cyclooxygenase-2 expression
M. Solà, A. Pujols, C. Marin, J. Mullot, M. Fuentes, A. Cardozo

P964 Dysarthria in corticobasal degeneration (CBD): A perceptual analysis
C. Ozsanac, P. Auzou, M. Jan, C. Doutriaux Mercier, A. Destée, L. Defebvre

P965 Camptocormia (Bent spine) and parkinsonism syndrome: A new clinical entity?
F. Bloch, J.-L. Hauteo, E. Etchepare, V. Hahn-Barma, D. Dormont, Y. Agid

P966 Orthostatic hypotension and attention in Lewy body disorders
C.M. Peralta, M. Stampedt, E. Karner, B. Benke, W. Poeke, G.K. Wonning

P967 Parkinsonism secondary to mitochondrial cytopathy: Distinctive features
K.J. Klos, J.E. Atkinson, D.M. Maraganore, C.M. Harper

P968 Retrocollis in progressive supranuclear palsy - Frequency, nature and effects of botulinum toxin treatment
C.H. Schrader, S.D. Suessehult, B. Herling, the NNIPPS-Study-Group

P969 [123I]-FP-CIT SPECT imaging of dopamine transporters in patients with cerebrovascular disease and clinical diagnosis of vascular parkinsonism
R. Djaladdt, V. Lami, M. Elamed, M. Lorberboym
Clinical heterogeneity in vascular parkinsonism

Shedding light on walking in the dark: A contrast of the effect on the gait of older adults with a higher-level gait disorder and controls
G. Leibovich, A. Kissler, T. Herman, N. Giladi, J.M. Hausdorff

Levodopa-induced hypotension in multiple system atrophy and Parkinson's disease: Characteristics and factors that predict its occurrence
N. Sarangmth, S.K. Doddaballapur, C.J. Mathias, U.B. Muthane

Progressive degeneration on striatopallidal pathways in the Parkinson variant of multiple system atrophy: A longitudinal diffusion weighted MRI study
K. Seppi, M.F. Schocke, K.J. Mair, W. Jascke, W. Poewe, G.K. Wenning

Cerebellar ataxic presentation of progressive supranuclear palsy: Report of two cases
B.E. Murray, T. Lynch

The spectrum of pathological involvement of the striatonigral and olivopontocerebellar systems in multiple system atrophy: Clinico pathological correlations
T. Ozawa, T. Revesz, J.L. Holton, N. Quinn, A.J. Lees, K.A. Josephs

Haemodynamic effects of clonidine in two contrasting models of autonomic failure: Multiple system atrophy and pure autonomic failure
T.M. Young, C.J. Mathias

Experimental evidence for a toxic etiology of Guadeloupean parkinsonism

The accuracy of clinical diagnosis of multiple system atrophy: Applications with “grey” cases and true negative cases
Y. Osaki, Y. Ben-Shlomo, G.K. Wenning, A.J. Lees, C.J. Mathias, N.P. Quinn

The accuracy of clinical diagnosis of progressive supranuclear palsy: Applications with “grey” cases and true negative cases
Y. Osaki, Y. Ben-Shlomo, C. Colosimo, G.K. Wenning, A.J. Lees, N.P. Quinn

Disturbance of attention filtering in dementia with Lewy bodies and Parkinson’s disease dementia
M.P. Perriol, K. Dujardin, P. Derambure, J.L. Bourriez, L. Defebvre, A. Destee

Galantamine for the treatment of dementia with Lewy bodies

Gait and motor disturbances are correlated with age-related white matter changes - Cross-sectional results of the LADIS (Leukoaraiosis And Disability) project
H. Baezner, C. Blahak, M.G. Hennerici, L. Pantoni, D. Inzitari, on Behalf of the LADIS Study Group

Parkinsonism with prominent cognitive decline and behavioural changes as the clinical expression of brainstem Lewy body disease accompanied by cerebrovascular changes
A. Cardozo, J. Díaz, E. Tolosa, M. Rey, M. Revilla, I. Ferrer

Reduced intracortical and interhemispheric inhibitions in corticobasal degeneration
P.K. Pal, C.A. Gunraj, A.E. Lang, R. Chen

Misdiagnosis of fragile X associated tremor/ataxia syndrome (FXTAS)
M.A. Leehey, E. Berry-Kravis, S. Jaccquemont, L. Zhang, R. Hagerman, P.J. Hagerman

Clinical, pathologic and genetic studies of frontotemporal dementia and parkinsonism linked to chromosome 17 (FTDP-17) associated with the exon 10 +3 mutation in the Tau gene

A preliminary observation: Increased frequency of fragile X expanded alleles in patients that meet diagnostic criteria for MSA
M.A. Leehey, L. Zhang, V. Wheelock, F. Tassone, R. Hagerman, P. Hagerman

The healthcare delivered to veterans with parkinsonism in the Pacific Northwest
K. Szwartzbrauch, R. Bourdage

Vascular parkinsonism – clinical and neuroimagingic features
C. Falup-Pecuraru, I. Varga, C. Francu, D. Minea

Differential diagnosis of parkinsonian syndromes with transcranial magnetic stimulation (TMS)
T. Kawakami, K.-I. Fujimoto

Parkinsonism following striatocapsular infarcts
C.M. Peraita, P. Werner, B. Holl, S. Kiechl, W. Poewe

Non-invasive nasal continuous positive airway pressure (CPAP) in multiple system atrophy (MSA) patients: Safety, acceptability and determinants
I. Ghorayeb, F. Yekhlef, B. Boulac, F. Tison

Symptomatic MSA-P: A case report of an unusual phenotype associated with an extensive dural AV-fistula
M. Stampfer-Kountchev, R. Seppi, E. Trinka, W.H. Poewe, G.K. Wenning

Increased OGG1 in parkinsonism related neurodegenerative disorders
J. Fukae, M. Takanashi, Y. Nakabeppu, N. Hatton, Y. Mizuno

Health-related quality of life in MSA measured by the short form 36 health survey questionnaire (SF-36) in European MSA patients: A cross-sectional baseline analysis of the EMSA-SG-Natural History Study
M. Saviores, F. Geser, K. Seppi, G. Kemmler, W. Poewe, G. Wenning on behalf of EMSA-SG

Urogenital dysfunction at the first visit: Differences between Parkinson’s disease and multiple system atrophy

Differences in first symptoms between Parkinson’s disease and multiple system atrophy

Limb apraxia and cognitive impairment in progressive supranuclear palsy
P. Soliveri, S. Piacentini, F. Giroli

PSP look alike in a patient with a dorsorostral midbrain lesion sparing dopaminergic nigrostriatal projection - Is axial rigidity independent of dopamine deficiency?
J. Lewerenz, B. Zurovski, A. Munchak

Corticobasal degeneration-like presentation with SCA8 mutation
Y. Baba, Z.K. Wszolek, M. Farrer, R.J. Uttley

Putaminal atrophy in multiple system atrophy

Dopa-responsive hemiparkinsonism due to midbrain Virchow-Robin spaces
M. Krause, S. Hännel, H.-M. Meinck

The effects of repetitive transcranial magnetic stimulation (rTMS) on frozen gait in the patients with parkinsonism
M. Tamaki, Y. Sawada, Y. Ichikawa, K. Arasaki, K. Sudo

Comparison of DWI and [123-I]–IBZM–SPECT for the differentiation of patients with the Parkinson variant of multiple system atrophy from PD
A. Diem, K. Seppi, M.F. Schocke, E. Donnemiller, G.K. Wenning, W. Poewe

Dopa-responsive hemiparkinsonism secondary to a contralateral ischemic lesion of the nigrostriatal dopaminergic pathway
G. Fénelon, C. Guidoz, E. Illy, P. Remy, P. Cesaro

A patient with PSP-like brain and spinal cord NFT-tau pathology presenting as young onset spastic paraplegia

Early presentation of gait disorder is indicative of non –Alzheimer’s dementia
L.M. Allan, D.J. Burn, C.G. Ballard, R. Kenny

Psychogenic parkinsonism: Clinical features of a large case series
P1009  New insights in the environmental origins of neurodegenerative disorders: Effects of prenatal stress on the sensitivity to post-natal exposure to pesticides in the rat
C.C. Vanbesien-Mailliot, M.-C. Chartier-Harlin, O. Viltart, M.-L. Caillé-Boudin, A. Pierce, D. Vieau

P1010  Dysregulation of chaperone proteins in Dementia with Lewy Bodies
I. Cantuti-Castelvetri, M. Ingelsson, J. Klucken, K. Ramasamy, B.T. Hyman, D.G. Standaert

P1011  Warning signs (‘red flags’) in multiple system atrophy (MSA): A preliminary cross-sectional analysis of 79 European MSA-P patients
F. Geser, M. Stampfer-Kountchev, K. Seppi, J.-P. Ndayisaba, G. Wenning, W. Poewe, on behalf of the European MSA-Study Group (EMSA-SG)

P1012  The European MSA-Study Group (EMSA-SG) natural history study of multiple system atrophy (MSA) – an analysis of baseline data
F. Geser, M. Stampfer-Kountchev, K. Seppi, J.-P. Ndayisaba, W. Poewe, G.K. Wenning, on behalf of the European MSA-Study Group (EMSA-SG)

P1013  The clinical presentation of multiple system atrophy (MSA) in Europe: An interim analysis of the EMSA-SG (European MSA-Study Group) Registry
F. Geser, M. Stampfer-Kountchev, K. Seppi, J.-P. Ndayisaba, G. Wenning, W. Poewe, on behalf of the European MSA-Study Group (EMSA-SG)

P1014  Dopa-responsive parkinsonism after acute subdural hematoma
A. Maertens de Noordhout, F. Daenen, V. Bex

P1015  Profile and severity of parkinsonian features in atypical parkinsonian disorders (APD)
G. Meco, N. Vanacore, V. Bonifati, U. Bonuccelli, G. De Michele, M. De Mari

P1016  Progressive Supranuclear Palsy in the Netherlands
L. Donker Kaat, A. Boon, P. Heutink, J.v. Swieten
Illuminating CNS

There is a new light in CNS drug development: **SCHWARZ PHARMA**. With an established reputation for excellence in cardiology and urology, we are now extending our expertise to CNS diseases.

**SCHWARZ PHARMA** is working to create new solutions for the treatment of life-altering diseases such as Parkinson’s disease, Restless Legs Syndrome, neuropathic pain and epilepsy. You will hear more about these novel therapies as they come to light. Please visit our website: [www.schwarzpharma-cns.com](http://www.schwarzpharma-cns.com)

Creating New Solutions
P1034 PET and neuropsychological features in a case of spinocerebellar ataxia type 17 (SCA17)  
J.E. Nielsen, T. Petersen, A. Noerremoele, A. Gjedde, L. Ehlers, L. Hasholt

P1035 Prenatal diagnosis of autosomal dominant hereditary spastic paraplegia (SPG4) using direct mutation detection  

P1036 The Val66Met polymorphism of the brain derived neurotrophic factor (BDNF) - a shared genetic risk factor for obsessive-compulsive behaviour and Gilles de la Tourette syndrome?  
S. Klaffke, I. Koenig, A. Ziegler, J. Hebebrand, O. Bandmann

P1037 Restless legs syndrome (RLS) in a large family (Family LA) with Parkinson-associated Parkinson’s disease (PD)  
S. Maniak, K. Kabakci, I. Pichler, P.L. Kramer, P.P. Pramstaller, C. Klein

P1038 PARK11 is not linked with Parkinson’s disease in European families  
J. Prestel, M. Sharma, A. Zimprich, B. Mueller-Muhls, T. Gasser, the European Consortium of Genetics in PD (GSPD)

P1039 Definition of the tau gene haplotype block that is associated with progressive supranuclear palsy  
R. de Silva, A.M. Pittman, A.J. Myers, N.W. Wood, J. Hardy, A.J. Lees

P1040 An English family with a dominantly inherited P53-like illness, genetic anticipation and cortical blindness  
D.J. Nicholl, S. Nightingale, C. Hawkins, P. Heutink

P1041 Genetic polymorphisms of the dopamine transporter gene and hallucinations in Parkinson’s disease  
J.G. Goldman, C.G. Goetz, E. Berry-Kravis, S.E. Leurgans, C. DeSai, L. Zhou

P1042 Identification of PARK6, a novel mitochondrial protein causing Parkinson’s disease  
E. Valente, P.M. Abou-Sleiman, V. Caputo, M.M. Muqit, G. Auburger, A. Bentivoglio

P1043 Clinical and molecular genetic analysis of hereditary dopa-responsive syndromes in Serbian population  
G. Djuric, P.A. Slominsky, M. Svetel, S.N. Illariooshkin, V. Kostic, E.D. Markova

P1044 Genome-wide microsatellite association studies for sporadic Parkinson’s disease by using the pooled DNA method  
T. Toda, W. Takeke, I. Mizuta, M. Yamamoto, N. Hattori, M. Murata

P1045 A novel mutation causing exon skipping within the epsilon-sarcoglycan gene causes myoclonus-dystonia syndrome with prominent psychiatric features  

P1046 Clinical and genetic study of parkin disease in a large sample set  
A.M. Bertoli-Avella, B.A. Oostra, G. Meco, P. Heutink, V. Bonifati, the Italian Parkinson Genetics Network

P1047 Mutational analysis of diveral metal transporter 1 in restless legs syndrome  
J. Winkelmann, P. Lichtner, D.P. Auer, A. Pastore, T. Meitinger

P1048 Evidence for further genetic locus heterogeneity in restless legs syndrome  
J. Winkelmann, P. Lichtner, C. Trenkwalder, T. Meitinger, T.M. Strom, B. Muller-Muhs

P1049 Effect of l-dopa and subthalamic surgery on proprioception in Parkinson’s disease patients  
M. Merello, J. Balej, C. Avelerya, R. Leiguarda

P1050 Prevalence of UCHL1, DJ1 and NR4A2 gene mutations in young onset PD (YOPD) patients  
I. Risling, O. Bandmann, C. Hoff, B. Burmester, W.H. Oertel, C. Möller

P1051 A subject with a homozygous exon 4 parkin deletion whose parkinsonism dramatically improves following smoking  
O. Dagu, A. Crawley, J. Werner, K. Gwinn-Hardy, G. Lopez
P1052  Parkin mutations in autosomal recessive early-onset parkinsonism (AR-EP)
N. Hattori, H. Yoshino, Y. Imamichi, Y. Miuono

P1053  Adult onset hereditary dystonia
K.P. Frei, M. Pathak, P. Pham, D.D. Truong

P1054  The role for Fragile X premutation in essential tremor and sporadic 
Parkinson disease: Findings from two cohorts of Italian patients
E. Di Maria, M. Grasso, G. Abbuzzese, P. Mandich, S. Ratto, R. Sciolia

P1055  PARK6-linked autosomal recessive early-onset parkinsonism in European 
and Asian populations
Y. Hatano, T. Shimazaki, K. Sato, V. Bonifati, N. Hattori, Y. Miuono

P1056  Chromosome 1 association map to identify gene(s) associated with age-
at onset and risk for Parkinson disease
S.A. Oliveira, L. Yi-Ju, Q. Xuejun, P.-VA. Margaret, V.M. Jeffery

P1057  Familial clustering of restless legs syndrome in a population isolate in South 
Tyrol (Northern Italy)
I. Pichler, S. Maniak, F.D. Vogl, G. Casari, K. Christine, P.P. Pramstaller

P1058  Molecular study of Park2 gene in 266 patients affected by early-onset 
Parkinson disease
D. Ghezzi, F. Invernizzi, E. Marelli, M. Zeviani, B. Garavaglia

P1059  Fronto-temporal dementia syndrome with parkinsonism in a Colombian 
family with E280A presenilin-1 mutation
N. Duarte, J. Lozano, M. Pena, W. Fernandez, G. Arboleda, H. Arboleda

P1060  Analysis of polymorphisms in APOE, ACE, alpha-synuclein and Tau genes 
and screening of mutations in the Parkin gene in Parkinson’s disease in 
Colombia

P1061  Clinical and genealogical study of a large Brazilian family with early-onset 
Parkinson’s disease
H. Chien, M. Costa, V. Bonifati, E. Barossa

P1062  Analysis of polyglutamine-coding repeats in the TATA-binding protein in 
different neurodegenerative diseases
Y.-R. Wu, C.-M. Chen, G.-J. Lee-Chen, H.-C. Fung

P1063  Mapping a gene for Parkinson’s disease in Norway
M. Toft, L. Skipper, M. Huhian, J. Asly, M. Farrer

P1064  A consanguineous Turkish family with early-onset Parkinson’s disease 
and an exon 4 Parkin deletion
O. Dogu, J. Johnson, D.G. Hernandez, M. Hanson, J. Hardy, H. Apaydin

P1065  Blinded diagnoses confirm elevated frequency in relatives of restless legs 
syndrome (RLS) probands in a case-control family study of RLS
W.A. Hening, W. Mysitnna, A.P. Richard, L. Suzanne, E.J. Earley

P1066  The role of the epsilon-sarcoglycan gene (SGCE) in Gilles de la Tourette 
patients
F. Asmuv, S. Schoenian, P. Lichtner, B. Mueller-Myhsok, O. Bandmann, T. Gasser

P1067  Identification of candidate genes for Parkinson disease (PD) using genetic 
linkage and gene expression in the substantia nigra
M.A. Hauser, M. Nureddine, C.M. Hulette, L. Yi-Ju, S. Clemens, J.M. Vance

P1068  Apolipoprotein E gene and Parkinson’s disease in Russian population 
T.B. Zagorourevskaya, I.A. Ivanova-Smolenskaya, S.N. Illarishokin, E.D. Markova

P1069  Slow acetylation genotype to influence the course of Parkinson’s disease?
G. Duda, G. Opala, T. Wilczok, B. Jasinska-Miya, J. Samelska, M. Bialecka

P1070  The contribution of PARK2 to Parkinson’s disease, a population genetic 
based study
P.M. Abou-sieain, D.G. Healy, K.K. Ahmadi, D.B. Goldstein, N.W. Wood

P1071  A single cycle of iron chelation therapy can stop progression of 
acelluloplasminemia for a sustained period of time
M. Pandolfo, I. Haemers, S. Goldman

P1072  Glutathione S-transferase P1 and Z1 alleles influence onset age in 
Parkinson’s disease caused by the α-synuclein A53T mutation
L.I. Golbe, G. Di Iorio, K.M. Markopoulou, A. Athanassiou, S. Papapanopolou, R.L. Watts

Neuroimaging
Poster numbers 1073-1130

P1073  Reversibility of D2 dopamine receptor downregulation after dopaminergic 
treatment withdrawal and subthalamic nucleus stimulation in Parkinson’s 
disease: A [123I]-Raclopride PET study

P1074  Perfusion-weighted imaging with TC-SPECT or perfusion-weighted MRI in 
combination with a spinal tap test is helpful in the diagnosis of patients 
with gait disorders caused by normal pressure hydrocephalus
F. Hertel, C. Walter, M. Schmitt, M. Moensdorf, M. Bettag, W. Jammers

P1075  Asymmetric loss of dopamine transporters in tremor-predominant hermi-
Parkinson’s disease
Y.-M. Shen, J.-S. Kim, Y.-A. Chung, K.-S. Lee

P1076  Striatal dopamine D2 receptor function measured by in vivo [123I]-IBZM 
pinhole SPECT correlates with ex-vivo quantification of striatal medium-
sized spiny neurons
S.W. Scholz, E. Donnenmiller, R. Moncayo, W. Poewe, G.K. Wenning, C. Scherffler

P1077  Voxel based analysis of [123I] b-CIT SPECT distinguishes idiopathic 
Parkinson’s disease from multiple system atrophy
C. Scherffler, K. Seppi, E. Donnenmiller, W. Poewe, G.K. Wenning

P1078  Neural correlates of motor timing in Parkinson’s disease and the effect of 
apomorphine studied with PET
M. Jahnshah, C. Jones, J. Zijlmans, R. Katzenschngler, C. Frith, N. Quinn

P1079  Repetitive involuntary limb movements in patients with brainstem lesions 
involving pontine tegumentum: Evidence for pontine inhibitory region in human
P. Lee, J. Lee, D. Shin, K. Huh

P1080  Superior Cerebellar Peduncle (SCP) volume measurement on MRI 
的不同iates progressive supranuclear palsy (PSP) from multiple system 
atrophy (MSA), Parkinson's disease (PD) and controls
D.C. Paviour, S.L. Price, J. Stevens, A.J. Lees, N.C. Fox

P1081  Cerebral glucose metabolism and dopamine transporter PET in SCA
U. Wüllner, M. Reimold, K. Bürk, M. Abele, M. Minnerop, H.-J. Machulla

P1082  Comparison of FP-CIT SPECT scans with F-Dopa PET scans in a similar 
group of patients with de novo and advanced stages of Parkinson’s disease

P1083  Dopamine transporter imaging (b-CIT-SPECT) in disulfiram-induced 
straital damage
F. Tison, F. Macia, E. Bertandeau, M. Guyot, E. Bussy, M. Ailard

P1084  Changes in cortical motor activity induced by levodopa administration 
in cerebellar multiple system atrophy: A positron emission tomography study
C. Brefel-Courbon, P. Payoux, J. Azulay, F. Durfl, F. Tison, O. Rascol

P1085  A PET study on the role of sigma-receptors in dopa-induced dyskinesia in 
patients with advanced Parkinson disease
T. Nimura, T. Ando, K. Yamaguchi, R. Shirane, M. Itoh, T. Tominaga

P1086  Chorea associated with non-ketotic hyperglycaemia and hiperintensity in 
basal ganglia on T1-weighted MRI. Presentation of a case with bilateral 
symptoms and images
V. Puente, C. Oliveras, I. Volmer, J. Jimenez, N. Segura

P1087  Brainstem [1] H-MRS in Parkinson patients with and without REM sleep 
behavioural disorders
L. Anagou, H. Meral, F. Ozer, A. Dincer
Brainstem atrophy quantification by magnetic resonance imaging (MRI) is powerful to differentiate idiopathic Parkinson’s disease (PD), multiple system atrophy (MSA) and progressive supranuclear palsy (PSP) Y. Rolland, B. Bruneau, M. Verin, C. Payan, G. Bensimon, the NWPPS Study Group


Brain energy metabolism in Huntington’s disease M. Wieler, C. Hanstock, W. Martin

Magnetic resonance spectroscopy in patients with spino cerebellar ataxia type 2 and type 3 J.-Y. Li, C.-S. Liu, P.-H. Lai, P.-C. Chen

Diffusion Tensor Imaging demonstrates differential involvement of brain stem structures in Progressive Supranuclear Palsy but not idiopathic Parkinson’s disease C.R. Blain, G.J. Barker, J.M. Jarosz, S.C. Williams, P.N. Leigh


Differences between idiopathic Parkinson’s disease and dementia with Lewy bodies detected with [18F]Dopa PET and positron emission tomography S. Gilman, K.A. Frey, R.A. Koeppe, R.L. Albin, L. Junck, M. Heumann

Positron emission tomographic measurement of acetycholinesterase activity in frontotemporal dementia and parkinsonism linked to chromosome 17 S. Hirano, H. Shinotoh, T. Kobayashi, Y. Tsuobi, Z.K. Wszolek, A. Aotsuka

Neuroimaging of neuronal circuits involved in generation of tics in patients with Tourette’s syndrome A. Lerner, E. Boudreau, A. Bagic, T. Hanakawa, D. Murphy, M. Hallett


Striatal uptake measured with FDOPA PET and cognition in advanced PD M. van Bellen, A.T. Portman, R.P. Maguire, J. Pruim, M. Koning, K.L. Leenders

Comparison of magnetic resonance imaging in subtypes of multiple system atrophy E. Lee, H. Cho, S. Kim, W. Lee

Attention to action increases activation of the supplementary motor area in Parkinson’s disease R. Cunnington, L. Carabott, G. Egan, R. Iansek

Quantifying striatal atrophy in Huntington’s disease patients G. Douaud, M.-J. Ribeiro, R. Maroy, A.-C. Bachoud-Lévi, P. Hantraye, P. Remy

Differential diagnosis of parkinsonian disorders - The diagnostic value of FDG PET T. Eckert, A. Barnes, S. Frucht, V. Dhawan, A. Feigin, D. Eidelberg

Three dimensional stereotactic surface projection SPECT analysis in Parkinson’ disease Y. Osaki, Y. Morita, M. Fukumoto, N. Akagi, S. Yoshida, Y. Dui

VBM as a tool to identify regions which may aid differential diagnosis of PSP, PD and MSA using MRI S.L. Price, D.C. Paviour, R.I. Scahill, J.M. Stevens, A.J. Lees, N.C. Fox

Nucleus lentiformis hyperechogenicity correlates with severity of neurological symptoms in Wilson’s disease U. Walter, K. Krollkowski, B. Tarnacka, R. Benecke, A. Czonkowska, D. Dressler

Bilateral neurostimulation systems used for deep brain stimulation: In vitro study of MRI-related heating at 1.5 tesla and implications for imaging during surgery in Parkinson’s disease R. Bhidayasiri, J.M. Bronstein, S.S. Sinha, S. Ahn, E.J. Bentkhe, M.S. Cohen

Reward, recognition and motor response processing – an fMRI study M. Keitz, R. Maguire, R. Kortekaas, J. den Boer, K. Leenders


Body posture and motor imagery in Parkinson’s disease R.C. Helmich, F.P. De Lange, B.R. Bloem, I. Toni

Substans nigra hyperechogenicity in asymptomatic and symptomatic parkin mutation carriers - An early predictor of disease manifestation? U. Walter, C. Klein, R. Hikre, R. Benecke, P.P. Pramstaller, D. Dressler


Voxel-based relaxometry (VBR): Application to multiple system atrophy (MSA) T. Klockgether, M. Minnerop, S. Karsten


Huntington’s disease and globus pallidus stimulation: A PET study A.P. Strafella, E. Moro, A.M. Lozano, Y.-W. Poon, A. Dagher, A.E. Lang

Aging effect on the rate of progression in Parkinson’s disease: A four year longitudinal PET study W. Xu, M. Schulzer, V. Sossi, T.J. Ruth, D.B. Calne, A.J. Stoessl

In vivo detection of neuropathological changes in different parkinsonian syndromes by voxel-based magnetization transfer imaging T. Peschel, J. Kaufmann, C. Schrader, R. Dengler, H.-J. Heinze, T. Eckert


Subthalamic stimulation in Parkinson’s disease modulates motor cortex B. Haslinger, K. Kaliteis, F. Alesch, H. Boecker, A.O. Ceballos-Baumann

The aging process of dopamine transporter is faster in younger healthy subjects before 45 years of age Y.-H. Weng, C.-S. Lu, T.-C. Yin

Supra- and infratentorial atrophy in the cerebellar variant of multiple system atrophy: A VBM study C. Brenneis, K. Egger, K. Seppi, M. Schocke, G.K. Wenning, W. Poewe

Discrimination of multiple system atrophy from Parkinson disease using coronal section of T2* weighted MRI T. Oikawa, K. Hisanaga, R. Fukatsu, H. Mochizuki, Y. Iwasaki, Y. Ibayama

Clinical and metabolic brain changes in tremor predominant Parkinson’s disease patients treated with Vim DBS M. Trost, E.S. Simon, V. Dhawan, J. Okuski, H. Fodstad, D. Eidelberg


P1126 Are any abnormalities in basal ganglia in frontotemporal dementia? A preliminary study through single photon emission computed tomography (SPECT) with ioflupane ([123-I-FP-CIT])
J. Papathanatalfi, N. Sifakis, P. Zikos, V. Kontoyanni, T. Visviki, C. Karageorgiou

P1127 Changes of glucose metabolism in patients with Parkinson's disease with disease duration
T. Eckert, A. Barnes, S. Frucht, V. Dhawan, M.F. Gordon, D. Eidelberg

P1128 Evaluating the diagnostic accuracy of [123-I]-I-CIT and SPECT in parkinsonian syndrome
D.L. Jennings, J.P. Seibyl, R. Tabamo, K. Marek

P1129 [123-I]-I-CIT and SPECT as a diagnostic tool in lower body parkinsonism
D.L. Jennings, J.P. Seibyl, R. Tabamo, K. Marek

P1130 MRI and deep brain stimulation: Safety-related considerations

Neuropharmacology
Poster numbers 1131-1166

P1131 Effects of nilutamide as “rescue therapy” in a MPTP + 3- NP mouse model of striatonigral degeneration: Experimental rationale for its use in multiple system atrophy

P1132 Dopamine and adenosine receptor interaction as basis for the treatment of Parkinson’s disease
M. Morelli, A.R. Carta, P. Annalisa, T. Elisabetta, S. Nicola

P1133 Long term effects of Helicobacter pylori eradication on L-dopa absorption in Parkinson’s disease patients
L. Brusa, A. Pietrocastelli, M. Pierantozzi, S. Galati, E. Fedele, P. Stanzione

P1134 Deleterious effects of minocycline in animal models of Parkinson’s disease and Huntington’s disease
E. Dignat, P.-O. Fernagut, X. Wei, Y. Du, E. Bezzard, F. Tison

P1135 Entacapone increases and extends striatal dopamine release following L-DOPA/benserazide treatment in the rat
M. Gerlach, M. van den Buuse, C. Blaha, D. Bremen, P. Riederer

P1136 Plasma homocysteine levels in pergolide treated Parkinson’s disease patients
S. Ozkan, O. Colak, C. Kutlu, M. Ertan, O. Alatas

P1137 Levodopa raises pain threshold in Parkinson’s disease: A clinical and experimental study through single photon emission computed tomography
C. Brefel-Courbon, P. Payoux, C. Thalamas, M. Galitzky, J. Montastruc, O. Carlen

P1138 Short and long term effect of low doses of botulinum toxin in 100 Tunisian patients over an 8-year period
N. Gouider-Khouja, G. El Euch, I. Turki, S. Chebel, F. Hentati

P1139 Desipramine increases L-DOPA-derived extracellular dopamine in the striatum of 6-hydroxydopamine-lesioned rats
A. Arai, K. Kannari, H. Shen, M. Baba, M. Matsunaga

P1140 Cabergoline, a dopamine agonist, prevent levodopa-induced abnormal increase of lipid peroxidation mainly due to increase of glutathione content and inhibition of caspase activities in 6-OHDA-lesioned mice
K.I. Tanaka, N. Ogawa

P1141 Metabotropic glutamate 5 (mGlu5) receptor antagonist-induced locomotion requires adenosine A1 receptors and dopamine D2 receptors and is potentiated by an A2A antagonist

P1142 The dopamine stabiliser ACR16 prevents L-dopa-induced sensitisation in the 6-OHDA-lesioned rat
H. Ponten, A. Carlsson, J. Kullingsjo, C. Sonesson, N. Waters, J. Tetroff

P1143 The diagnosis and management of pergolide-induced fibrosis
P. Agarwal, S. Fahn, S.J. Frucht

P1144 Effects of gap junction blockade in the MPTP-lesioned primate and rodent models of L-DOPA-induced dyskinesia
J. Lee, J. Gomez-Ramirez, T. Johnston, P. Carlen, A.E. Lang, J.M. Brotchie

P1145 Treatment of restless legs syndrome with subcutaneous apomorphine in a patient with short bowel syndrome
T. Tings, G. Stens, W. Paulus, C. Trenkwalder, S. Happe

P1146 Modulation of histamine H3 receptor-mediated transmission in the MPTP-lesioned non-human primate and rodent models of L-DOPA-induced dyskinesia
J. Gomez-Ramirez, J. Lee, T. Johnston, S.H. Fox, J.M. Brotchie

P1147 Effect of zolpidem on parkinsonian symptoms in patients with advanced Parkinson’s disease
G.A. Tagaris, V. Sakkou, P. Zikos, A. Sarafianos, P. Vrentas, C.E. Karageorgiou

P1148 A simple in vivo assay in the rodent for identifying novel drug therapies for L-DOPA-induced dyskinesia
T. Johnston, J. Lee, J. Gomez-Ramirez, S.H. Fox, J.M. Brotchie

P1149 Effects of do novo treatment with the alpha-2 adrenergic receptor antagonist, idazoxan, on the development of L-DOPA-induced motor complications
T. Johnston, J.M. Brotchie

P1150 Open-label, dose escalation, safety study of Botulinum Toxin Type B (MYOBLOC™) in patients with Hemifacial Spasm
R.M. Trosch, C.H. Adler

P1151 Levodopa for chronic neck pain: A cross-over double blind, placebo controlled study
M. Marciniak, V. Guralnik, U. Dillmann, G. Becker

P1152 Subcellular re-distribution of the synapase-associated proteins, PSD95 and SAP97 in animal models of Parkinson’s disease and L-DOPA-induced dyskinesia

P1153 The effects of NMDA receptor antagonism in a rat model of tardive dyskinesia
C. Taronis, D. Kiertsis, A. Evangelou, S. Konitsiotis

P1154 Tetrabenzatine treatment in hyperkinetic movement disorders

P1155 Three cases of peripheral edema caused by prolonged use of ropinirole
D. Apetauerova, J. Sinivasan, P. Gross

P1156 A high throughput screening assay for identifying potential neuroprotective agents in Parkinson’s disease
J.E. Nash, S.Y. Lee, S. Kalia, A.M. Lozano

P1157 Continuous stimulation: Supplementation of levodopa/carbidopa with entacapone reduces movement fluctuations
T. Muller, J. Welnic, N. Meinel, S. Muhllack, D. Woitalla, D. Bremen

P1158 Cabergoline stimulates synthesis and secretion of neurotrophic factors by primary cultured neurons or astrocytes
S.A. Kuno, K. Otto, A. Fujinami, A. Sakakimoto, Y. Kitaura, M. Otta

P1159 Effect of (+)-BPAP on the expression of neurotrophins and their receptors in mesencephalic slice cultures
S. Shimazu, K. Takahata, C. Hiramii, H. Hayashi, F. Yoneda, A. Akaibe

P1160 Double blind evaluation of symptomatic effect at the end of a 12 week controlled study
M. Onofrj, A. Thomas, P. Sala, G. Nordera, G. Fabbrini, R. Fariello

P1161 Changes in neuroendocrine response to L-DOPA during long term treatment in restless legs syndrome augmentation
D. Garcia-Borreguero, R. Egatz, O. Larrosa, C. Serrano

P1162 Aripiprazole in the treatment of movement disorders
M.S. Eisa, B. Jabbari
P1163 Endocannabinoid levels are altered in parkinsonism and L-DOPA-induced dyskinesia in the MPTP-lesioned macaque
M. Van Der Steil, S.H. Fox, V. Di Marzo, J.M. Brotchie

P1164 Involvement of both delta, and delta, opioid receptors in the anti-parkinsonian actions of the delta opioid receptor agonist SNC89 in the reserpine-treated rat
P. Hallett, J.M. Brotchie

P1165 A double-blind, randomized, parallel group design comparison of botulinum toxin, type A (Botox) and botulinum toxin, type B (Myobloc) on systemic and ocular autonomic symptoms and physiology in patients with cervical dystonia

P1166 Anti-parkinsonian effects of delta opioid receptor stimulation are accompanied by dystonia in MPTP-lesioned non-human primates previously treated with L-DOPA
T. Johnston, S.H. Fox, J. Gomez-Ramirez, J. Lee, J.M. Brotchie

Non-Motor Aspects of Movement Disorders
Poster numbers 1167-1209

P1167 Aripiprazole for drug-induced psychosis in Parkinson's disease: Preliminary experience
H.H. Fernandez, M.E. Tieschmann, J.H. Friedman

P1168 Discontinuation of antipsychotic drugs in stable Parkinson patients with a history of drug-induced psychosis
H.H. Fernandez, M.E. Tieschmann, M.S. Okun

P1169 Personality in essential tremor: Additional evidence of non-motor manifestations of the disease?
A. Chatterjee, E.C. Jurewicz, L.M. Applegate, E.D. Louis

P1170 Psychomotor speed, flexibility and verbal memory in Huntington's disease
J. Roth, M. Preiss, J. Klempir, H. Brozova, O. Ulomanova, E. Ruzicka

P1171 Familial risk factors for hallucinations in Parkinson's disease

P1172 Cognitive function in multiple system atrophy of the cerebellar type (MSA-C)
K. Bürk, C. Globas, I. Daum

P1173 Quetiapine for sleep disorders in Parkinson's disease

P1174 Working memory deficits correlate with frontal atrophy in progressive supranuclear palsy

P1175 Visuospatial attention in Huntington's disease
J. Fielding, N. Georgiou-Karistianis, L. Millist, A. Churchyard, E. Chiu, O. White

P1176 Parkinson's disease dementia in a community-based autopsy sample of dementia
J.B. Leverenz, D.W. Tsuang, E.B. Larson, T. Montine, M. Kraybill, D. Nochlin

P1177 Effects of levodopa and STN stimulation on decision making in Parkinson's disease
A. Funkiewiez, C. Arduin, P. Krak, B. Dubois, A.-L. Benabid, P. Pollak

P1178 The effect of voice therapy on feedback control in parkinsonian speech
J.F. Houde, S. Nagarajan, T. Heinks, C.M. Fox, L.O. Ramig, W.J. Marks

P1179 An observational study of pattern and occurrence of non-motor symptoms in Parkinson's disease
A. Gulati, A. Forbes, F. Stegie, C. Clough, R.K. Chaudhuri

P1180 The role of cerebrovascular risk factors for dementia in PD
K. Haugarvoll, D. Aarsland, J.M. Brotchie

P1181 The Parkinson Fatigue Scale (PFS-16): The development of a new disease-specific instrument for use in research and clinical practice

P1182 Vigilance states in a parkinsonian model, the MPTP mice
C. Monaca, C. Laloux, R. Berré, L. Defebvre, A. Destée, P. Derambure

P1183 Anticipatory responses in rapid stimulus streams as a measure of motor impulsivity in Tourette syndrome
F. Richer, M. Thibeault, S. Marti, G. Rouleau, S. Chouinard

P1184 Decreased cognitive control during deep brain stimulation of the STN
T. Hershey, F.J. Revilla, A. Wernie, P. Schneider-Gibson, J.L. Dowling, J.S. Perlmutter

P1185 Validation of the Quality of Life in Essential Tremor Questionnaire (QUEST)
A.I. Tröster, R. Pahwa, C.M. Tanner, K.E. Lyons

P1186 Emotional memory in Parkinson's disease

P1187 A clinical observational study of the pattern and occurrence of non-motor symptoms in Parkinson's disease ranging from early to advanced disease
A. Gulati, F. Alison, S. Frauke, K. Linda, C. Chris, K.R. Chaudhuri

P1188 Radiotherapy as treatment of hypersalivation in Parkinson's disease and MSA, long-term follow-up data on the efficacy and safety
T. van Laar, M.A. Heesters, K.L. Leenders

P1189 Modification of respiratory function parameters in patients with severe Parkinson's disease
M. De Pandis, F. Stefanelli, G. De Simone, C. Iannello, I. Meoli, F. Stochchi

P1190 Cognitive function in adult patients with Sydenham's chorea: Preliminary results
R.G. Beato, F.E. Cardoso

P1191 Obessive-compulsive behavior and hyperactivity and attention deficit disorder in Sydenham Chorea
D.P. Maia, F.E. Cardoso, M.C. Cunningham, A.L. Teixeira

P1192 Affective disturbances and quality of life in patients with essential tremor
P.V. Makedonsky, O.S. Levin

P1193 Defective imitation of limb gestures in Lewy body dementia: A useful early clinical sign
C. Aveleyra, G. Russo, F. Manes, M. Merello, R. Leiguarda

P1194 Comparing semantic, letter and action fluency in Huntington's disease: A preliminary study
M.J. Azambuja, M.S. Haddad, M. Radanovic, F.R. Barbosa, L.L. Mansur

P1195 Depression predicts the pattern of cognitive impairment in early Parkinson's disease
E. Stefanova, A. Potrebić, L. Zirojadja, A. Maksimovic, N. Dragasevic, V. Kostic

P1196 The result of dopaminergic degeneration and the effects of medication on bladder function in Parkinson's disease
K. Winge, L. Friberg, L. Werdelin, K.K. Nielsen, H. Stimpl

P1197 Osmolarity depended effect of water on blood pressure
A. Lipp, J. Jordan, G. Arnold

P1198 Does bilateral high-frequency stimulation of the subthalamic nucleus aggravate apathy in Parkinson's disease?
V. Czernnecki, B. Pillon, J.-L. Houeto, M.-L. Welter, V. Mesnage, Y. Agid

P1199 Cognitive initial symptoms and disease progression in cortico-basal degeneration
T. Sgaramella, L. Bartolomei, V. Toso

P1200 The frontal syndrome in Parkinson's disease: Its prevalence and direct impact on activities of daily living
M.-A. Bedard, F. Paquet, S. Chouinard, P. Blanche, V. Soland, J. Fillon

P1201 To ascertain the effect of levodopa on mood in parkinsonism
S.A. Malloy, J.T. O'Brien, I.G. McKeith, D.J. Burn

P1202 Neuropsychiatric symptoms in Parkinson's disease patients presenting for subthalamic stimulation
V. Voon, J.A. Saint-Cyr, A.M. Lozano, E. Moro, A.E. Lang
P1204 Impairment of linguistic rule application in basal ganglia disease
M.M. Telchmann, E.E. Dupoux, A.-C.A. Bachoud-Lévi

P1205 Hallucinations induced by antidepressants in PD patients
E. Fabrizio, C. Pauletta, C. Aurilla, M. Colassanti, G. Fabbrini, G. Meco

P1206 Parkinson’s disease and pesticide exposure: Does a selective cognitive profile exist?
M. Gasparini, G. Caldara, E. Fabrizio, S. Di Rezze, N. Vancare, G. Meco

P1207 Psychosis in the course of Parkinson’s disease and the treatment response to atypical antipsychotics
T. Sobow, M. Gorczowski, I. Kłoszewska

P1208 Severe “off anxiety” improves with deep brain stimulation of the subthalamic nucleus

P1209 Long-term effect of continuous positive air pressure (CPAP) in the treatment of nocturnal stridor in multiple system atrophy (MSA)
A. Irazo, J. Santamaria, E. Tokosa, I. Vilaseca, F. Valdeolmillos, M. Martí

Other Clinical

Poster numbers 1210-1277

P1210 Osteoporosis in Parkinson’s disease
B. Wood, J. Hunter, R. Walker

P1211 Cognitive assessment of a representative community population with Parkinson’s disease using the Cambridge Cognitive Assessment-Revised (CAMCOG-R)
R.J. Athey, R.W. Porter, R. Walker

P1212 Deep brain stimulation of the ventral caudate nucleus is effective in obsessive-compulsive disorder and major depression

P1213 Cognitive function testing in ADHD children: Potential utility of a novel, web-based battery
R. Barak, Y. Leitner, E.S. Simon, N. Giladi, J.M. Hausdorff

P1214 Gait variability in older adults with age-associated cognitive decline
J.M. Hausdorff, M. Mordechovitch, N. Giladi

P1215 Attention: Regulation of stride-to-stride variability of gait may requires attention
Y. Leitner, R. Barak, N. Giladi, L. Gruendlinger, J.M. Hausdorff

P1216 Screening for falls, stroke or dementia risk factors in a self-referral, middle age population: Is it worth the effort?
N. Giladi, M. Mordechovitch, J.M. Hausdorff, H. Shabtai, Y. Balash, L. Gruendlinger

P1217 Deficits in executive function in idiopathic elderly fallers: Association with fall risk
S. Springer, N. Giladi, E.S. Simon, J.M. Hausdorff

P1218 Restless legs syndrome with L thyroxine: Clinical, biochemical and polysomnographic correlation
P. Rattanapap, E. Tan, S. Ho, L. Koh

P1219 Retinal nerve fiber layer thinning in Parkinson’s disease
R. Inzelberg, A. Ramirez, P. Nisipeanu, R.L. Carasso, A. Ophir

P1220 Daytime somnolence in ADHD patients treated with the dopamine receptor agonist ropinirole
M. Gerlach, A. Claus, S. Peter, W. Christoph, A. Warnke

P1221 Psychogenic or non-psychogenic dysarthrophonia?
D. Haubenberger, M. Vigl, I. Busslinger, D.-M. Denk, E. Fertl, E. Auff

P1222 Restless legs syndrome refractory to therapy: Successfull treatment with continuous intrathecal morphine application
J. Haan, A. Koulousakis, D. Lenartz, V. Sturm

P1223 Does actigraphy provide good PLM counts? A validation study with polysomnography
B. Hogl, V. Gschlösser, B. Frauscher, E. Brändauer, H. Ulmer, W. Poewe

P1224 Incidence of vascular hemiballism in the population of Belgrade
V.S. Kostic, T. Pekmezovic, M.V. Svetel, A. Ristic, R. Raicevic, M. Ivanovic

P1225 Parkinsonism and exposure to neuroleptic drugs in residents of an Italian nursing home
G. Riboldazzi, D. Calandrella, A. Citterio, C. Mascetti, G. Bono, E. Martignoni

P1226 Static disturbances in different variants of cerebrovascular pathology
L.L. Kononova, N.J. Anan’eva, O.A. Balunov

P1227 Efficacy of graduated-dose levetracetam in treating restless legs syndrome and associated hypersomnia: A pilot study
D.M. Lacey

P1228 Optic ataxia due to impaired visuomotor transformation
T. Haid, M. Koffler, E. Pucks-Faes, A. Mayr, E. Quirbach, S. Felber

P1229 A new approach to improve the reliability and validity of RLS diagnoses: The restless legs syndrome diagnostic index (RLS-DI)
H. Benes

P1230 Prevalence and severity of restless legs syndrome in France - The “INSTANT Study”
F. Tison, E. Lainey, D. Leger, A. Crochard, S. Bouee, A. El Hasnaoui

P1231 Treatment of facial synkinesia and hyperaclimation following facial nerve palsy with botulinum toxin
T. Abe, C. Tanaka, K. Sako, M. Mizobuchi, A. Nihira, T. Matsuhashita

P1232 The long-term management of RLS with ropinirole: Maintained efficacy over 36 weeks
J. Haan, D. Volc, J. Montplaisir

P1233 Restless arms syndrome
L. Queiraz, F.C. Freitas

P1234 Post-ictonic autoimmune neuropsychiatric disorder associated with streptococcus (PANDAS), is it a self-limited disease? A six-year follow-up
G. Fabiani, H. Telve

P1235 Symptoms miming of Lewy body disease (LBD) in young patient after heroin intoxication
D. Kountouris, K. Koutsoubelis

P1236 Pramipexole induces a rapid and substantial improvement of idiopathic restless legs syndrome: Results of a large randomized double-blind placebo-controlled dose-finding study
K. Hirvonen, M. Partinen, A. Alakajala, L. Jarna, J. Terttunen

P1237 An inbred-strain of mice as an animal model of restless legs syndrome (RLS)

P1238 Safety and efficacy of tetrabenazine in childhood hyperkinetic movement disorders
K. Vuong, C.B. Hunter, N. Mejia, J. Jankovic

P1239 Periodic limb movements during sleep or restless legs syndrome in patients on hemodialysis

P1240 Painful arm and moving fingers: Clinical features of six cases
S. Lee, W. Yoon, E. Jeong, W. Lee

P1241 Antidepressants and Periodic Leg Movement Disorder
G.N. Rizzo

P1242 The adverse-event profile of ropinirole in the treatment of RLS
P. Montagna, P. Tidwell, B. Yee

P1243 The evidence base for ropinirole in RLS: Results from an extensive clinical trial programme
L. Ferini-Strambi, J. Montplaisir, T. Dreykluft

P1244 Alternating hemiplegia of childhood: A family with possible recessive inheritance
A. de Falco, V. Scarrano, M. Buongiorno, E. Marano, G. De Michele, A. Filla

P1245 A family with atypical parkinsonism and diffuse leukoencephalopathy with spheroids
Y. Baba, R.J. Uitti, D.W. Dickson, Z.K. Wszolek, T. Bird, B. Ghetti
P1246 L-Dopa therapy working only on a late phase of disease in a case of neurodegeneration with brain iron accumulation (NBIA)
L. Bartolomei, G. Billo, V. Toa
P1247 Efficacy of cabergoline for the treatment of sensori-motor symptoms and sleep disturbances in restless legs syndrome: A placebo-controlled, 5-week, double-blind, randomized, multicenter, polysomnographic study
W.H. Oertel, H. Benes, S. Happe, R. Kohnen, M. Leroux, K. Stasny-Köster
P1248 Chorea and epilepsy partialis continua as initial signs in probable Creutzfeldt-Jacob disease
B. Donmez, I. Octura, R. Cakmur
P1249 Frontotemporal degeneration with astrocyte-predominant tauopathy and motor neuron disease mimicking corticobasal degeneration: An autopsy case
P1250 A case with painless moving toes syndrome
P1251 Lessons learned from the long-term cabergoline safety trial in restless legs syndrome patients
H. Benes, M. Leroux, R. Kohnen
P1252 Restless legs syndrome: A case-series study of 97 patients
V. Kiriakakis, Y. Kapasaki, P. Vrentas, N. Tsiridis
P1253 Paroxysmal unilateral spasm of the jaw with facial atrophy. A rare manifestation of trigeminal cranial neuropathy
N. Galvez-Jimenez, A. Podichetty, M. Hargreave
P1254 Defining clinical relevance of treatment outcome in studies with restless legs syndrome patients: Example from the cabergoline dose-finding trial
R. Kohnen, H. Benes, M. Leroux, K. Stasny-Köster, W.H. Oertel
P1255 Long-term effects of pramipexole in the treatment of restless legs syndrome
M. Fantini, A. Desautels, M. Michaud, D. Petit, J. Montplaisir
P1256 Reversible extra-ontine and central pontine myelinolysis presenting with dystonia and mental status changes in a patient with antiphospholipid syndrome
M. Porta, G.R. Maggioni, F. Lella
P1257 Anti-histamine and daytime benzodiazepine effects on restless legs syndrome patients: Example from the cabergoline dose-finding trial
R. Kohnen, H. Benes, M. Leroux, K. Stasny-Köster, W.H. Oertel
P1258 Video assessment of rTMS for Tourette syndrome
F. Stocchi, G. Battaglia, L. Vacca, P. Grassini, N. Modugno, W.C. Olanow
P1259 Tetrabenazine, monoamine depleter, effective in the treatment of Tourette syndrome
P. Agarwal, R. Kumar, V. Segro, L.C. Seeberger
P1260 Long-term efficacy of ropinirole in RLS
M. Fantini, A. Desautels, M. Michaud, D. Petit, J. Montplaisir
P1261 Tetrabenazine, monoamine depleter, effective in the treatment of Tourette syndrome
P. Agarwal, R. Kumar, V. Segro, L.C. Seeberger
P1262 Diagnostic pallidotomy for primary CNS lymphoma (case report)
F.J. Khan, R. Young
P1263 Ropinirole reduces periodic leg movements in REM sleep behavior disorder
P1264 Dopamine transporter imaging in Tourette syndrome: Evaluation by NeuroSPECT of Trodat 1-Tc99m
M. Fantini, J.-F. Gagnon, S. Rompré, L. Ferini-Strambi, J. Montplaisir
P1265 Manganese, movement disorders, and welding
M. Fantini, J.-F. Gagnon, S. Rompré, L. Ferini-Strambi, J. Montplaisir
P1266 Use of tramadol in the treatment of motor and vocal tics in severe Tourette’s syndrome patients
M. Porta, G.R. Maggioni
P1267 Circadian rhythm of restless legs syndrome symptoms: Relationships with salivary melatonin, core body temperature, and subjective vigilance
M. Michaud, M. Dumont, B. Selmaoui, J. Paquet, M.L. Fantini, J. Montplaisir
P1268 Postural tremor and cerebellar dysfunction in a patient with Creutzfeldt-Jakob disease
M. Porta, G.R. Maggioni
P1269 Nocturnal quiescegenic dyskinesia: A new sleep-related movement disorder
S. Lesage, R. Allen, C. Earley
P1270 Aripiprazole is beneficial in refractory tics
M. Fantini, J.-F. Gagnon, S. Rompré, L. Ferini-Strambi, J. Montplaisir
P1271 Periodic leg movements in REM sleep behavior disorder: Further observations
M. Fantini, M. Michaud, J.-F. Gagnon, L. Ferini-Strambi, J. Montplaisir
P1272 Manganese, movement disorders, and welding
J.Y. Fang, T.L. Davis
P1273 Long-term prognosis of psychogenic movement disorders
J. Montplaisir
P1274 Polysomnographic features of REM sleep behavior disorder
M. Fantini, J.-F. Gagnon, S. Rompré, L. Ferini-Strambi, J. Montplaisir
P1275 Diabetes mellitus secondary to antiphospholipid syndrome
M. Fantini, J.-F. Gagnon, S. Rompré, L. Ferini-Strambi, J. Montplaisir
P1276 Periodic leg movements in REM sleep behavior disorder: Further observations
M. Fantini, M. Michaud, J.-F. Gagnon, L. Ferini-Strambi, J. Montplaisir
P1277 Periodic leg movements in REM sleep behavior disorder: Further observations
M. Fantini, M. Michaud, J.-F. Gagnon, L. Ferini-Strambi, J. Montplaisir
P1278 Manganese, movement disorders, and welding
J.Y. Fang, T.L. Davis
P1279 Long-term effects of ropinirole in RLS
M. Fantini, A. Desautels, M. Michaud, D. Petit, J. Montplaisir
P1280 Tetrabenazine, monoamine depleter, effective in the treatment of Tourette syndrome
C.B. Hunter, K. Vuong, N. Mejia, J. Jankovic
P1281 Tetrabenazine, monoamine depleter, effective in the treatment of Tourette syndrome
B. Ho, D. Apetauerova, J. Arte, J. Russell
P1282 Tetrabenazine, monoamine depleter, effective in the treatment of Tourette syndrome
B. Ho, D. Apetauerova, J. Arte, J. Russell
P1283 Bilinear transmission of Tourette syndrome in a semi-isolated population
F. Scarano, G. Volpe, T. Tucci, P. Mancini, V. Brescia Morra, G. De Michele
P1284 Geriatric tics are often linked to an exacerbation of early life symptoms by an external trigger
J. Fillon, F. Richer, V.L. Soland, P.J. Blanchet, S. Chouinard
P1285 Soluble adhesion molecules in Tourette syndrome
P1286 Immunocytological analysis of B-, T-, and natural killer cell subsets in Tourette syndrome patients
C. Moller, B. Tackenberg, K. Muller-Vahl, M. Fruns
P1287 Video assessment of rTMS for Tourette syndrome
C. Moller, B. Tackenberg, K. Muller-Vahl, M. Fruns
P1288 Use of tramadol in the treatment of motor and vocal tics in severe Tourette’s syndrome patients
M. Porta, G.R. Maggioni
P1289 Use of tramadol in the treatment of motor and vocal tics in severe Tourette’s syndrome patients
M. Porta, G.R. Maggioni
POSTER SESSION 4

P1331 Frequency dependence of tremor suppression with thalamic stimulation in essential tremor
M. Ushe, S. Tabbal, M. Hong, J.W. Mink, K.M. Rich, J.S. Perlmutter

P1332 The oscillatory cortico-subcortical network of essential tremor
A. Schnitzler, C. Munke, M. Butz, L. Timmermann, J. Gross

P1333 Prevalence and severity of tremor in familial essential tremor
J.R. Gilbert, J.M. Stajich, S. Knauer, B. Scott, J.M. Vance, A.E. Ashley-Koch

P1334 Primary Orthostatic Tremor: An open-label study of gabapentin
J.P. Rodrigues, D. Edwards, M. Byrnes, S.E. Walters, R. Stell, F.L. Mastaglia

P1335 Motor cortex involvement in generation of essential tremor
J. Raethjen, F. Kopper, R.B. Govindan, G. Deuschl

P1336 Two different pathogenetic mechanisms in psychogenic tremor
J. Raethjen, F. Kopper, R.B. Govindan, J. Volkmar, G. Deuschl

P1337 Familial presentation of primary orthostatic tremor
G.E. Zeppa, S.B. Palacio

P1338 Sensory tricks in essential palatal tremor: Functional neuroimaging evidence of hyperactivation of the inferior olive in two patients
We expect to make a difference.

BERTEK NeuroCare expects to make a difference in the lives of patients who suffer from Parkinson’s disease.

Visit booth #123 to receive recent information about Parkinson’s disease.

BERTEK NeuroCare

Improving Medicine. Enhancing Life.
Future International Congresses of Parkinson’s Disease and Movement Disorders

9th
New Orleans, LA USA
March 5 to 8, 2005

10th
Kyoto, Japan
October 29 to November 2, 2006

11th
Istanbul, Turkey
June 3 to 7, 2007

12th
Chicago, IL USA
June 22 to 26, 2008