

# Poster Sessions 1-2

## Session Room : **Room D**

The posters should be mounted, presented and removed based on one of the following schedules. The presenters for poster sessions are requested to be at the site of the posters at the designated time to answer questions from participants. The poster sessions will not be chaired. Posters which are not removed during the designated time will be disposed of at the discretion of the secretariat.

	Mounting	Presentation	Removal
<b>Poster Session 1</b>			
P1-Odd Number	Nov.15, 8:30-13:00	Nov.15, 19:00-19:45	Nov.16, 8:00-10:00
P1-Even Number	Nov.15, 8:30-13:00	Nov.15, 19:45-20:30	Nov.16, 8:00-10:00
<b>Poster Session 2</b>			
P2-Odd Number	Nov.16, 11:00-13:00	Nov.16, 13:45-14:15	Nov.17, 13:00-14:00
P2-Even Number	Nov.16, 11:00-13:00	Nov.16, 14:15-14:45	Nov.17, 13:00-14:00



- P1-1 Vestibular Tributaries to the Vein of the Vestibular Aqueduct**  
Hansen JM, Qvortrup K, Friis M (Denmark)
- P1-2 External Aperture of the Vestibular Aqueduct in Acute Low-tone Sensorineural Hearing Loss**  
Kuwashima S, Sato H, Nakasato T (Japan)
- P1-3 Measuring Organ of Corti Mechanical Deformation in a Model of Acute Endolymphatic Hydrops**  
Chaparro MP, Kalinec F (USA)
- P1-4 Expression of Cyclic Nucleotide Phosphodiesterases in Human Sacculae; Implications for the Regulation of Water and Ion Homeostasis**  
Degerman E, Rauch U, Hultgårdh A, Lindberg S, Magnusson M (Sweden)
- P1-5 Acute Low-tone Hearing Loss (ALHL) as a Precursor of Meniere's Disease: Clinical Study of Nystagmus Findings in Patients with ALHL Patients Using an Infrared CCD Camera**  
Yabe T, Yabe R (Japan)
- P1-6 Meniere's Disease Masquerading in Congenital Nystagmus**  
Hiruma K, Numata T, Mitsuhashi T, Tomemori T, Watanabe R (Japan)
- P1-7 A Case of Bilateral Hearing Loss Following External Ventricular Drainage**  
Lim HW, Hyun SM, Kang WS, Chung JW (Korea)
- P1-8 Three-dimensional Quantitative Evaluation of the Vestibular Aqueduct in Meniere's Disease Using Multiplanar Reconstruction CT Image**  
Miyashita T, Toyama Y, Inamoto R, Mori N (Japan)
- P1-9 Three Dimensional Quantification of the Inner Ear in Patients with Meniere's Disease**  
Osaki Y, Horii A, Doi K, Kitahara T, Imai T, Inohara H, Mori N (Japan)
- P1-10 Comparison of the Diagnostic Value of 3T-MRI after Intratympanic Injection of GBCA, Electrocochleography, and Glycerol Test in Patients with Meniere's Disease**  
Fukuoka H, Takumi Y, Miyagawa M, Tsukada K, Oguchi T, Usami S (Japan)
- P1-11 3D-FLAIR MRI Findings in Patients with Low-tone Sudden Deafness**  
Tanigawa T, Tanaka H, Nonoyama H, Tsuchiya Y, Katahira N, Ueda H (Japan)
- P1-12 MRI Inner Ear Scanning for Meniere's Disease Correlated with Tone Burst Electrocochleography (EcochG)**  
Hornibrook J, Coates M, Goh T, Bird P (New Zealand)
- P1-13 Long-term Follow-up of Hearing Level in Patients with Meniere Disease**  
Saka N, Seo T, Sakagami M (Japan)
- P1-14 Peak Audiogram of Meniere's Disease**  
Ochiai A, Naganuma H, Tokumasu K, Okamoto M (Japan)
- P1-15 Head-shaking after Nystagmus Test as Convenient Method for Diagnosis of Meniere's Disease**  
Yuen K (Japan)
- P1-16 The Clinical Usefulness of Cochlear Hydrops Analysis Masking Procedure (CHAMP) in Diagnosis of Meniere's Disease**  
Lee H-J, Lee JS, Park ES, Kim MK, Hong SK, Kim HJ (Korea)
- P1-17 Diagnosis of Meniere's Disease with Electrocochleographic and Symptomological Assessment**  
Kalin C, Hornibrook J, Lin E, O'Beirne G (New Zealand)



- P1-18 Ocular (o-VEMP) and Cervical (c-VEMP) VEMPS in Patients with “Clinically Certain” Meniere’s Disease**  
McIlhinney S, O’Beirne G, Lin E, Hornibrook J (New Zealand)
- P1-19 Effects of Galvanic Stimulation on Spontaneous Nystagmus in Meniere’s Disease and Vestibular Neuritis: A Preliminary Study**  
Jeong S-H, Kim JS (Korea)
- P1-20 Prognosis of Acute Low Tone Sensory Neural Hearing Loss without Vertigo: Verification of Initial Neurotologic Parameters Predicting Progression to Meniere’s Disease**  
Hong SK, Nam SW, Lee JS, Kim HJ, Lee HJ (Korea)
- P1-21 A Novel Model for Prognosis of Meniere’s Disease Using Oxidative-Stress Susceptibility of Lymphoblastoid Cell Lines**  
Hayashi K, Kobayashi R, Kitamura K, Goto F, Ogawa K, Matsumoto T (Japan)
- P1-22 Predictive Value of Electrocochleography on Hearing in Meniere’s Disease**  
Moon IJ, Kim SH, Cho YS, Hong SH, Chung WH (Korea)
- P1-23 Treatment of Meniere’s Disease with Transtympanic Ventilation Tube**  
Ogawa Y, Otsuka K, Inagaki T, Shimizu S, Kitajima N, Kondo T, Suzuki M (Japan)
- P1-24 Intratympanic Xylocaine Injections for Meniere’s Diseases**  
Nomura Y, Toi T, Ikeda A, Masuda T, Hirai R, Shigihara S, Ikeda M (Japan)
- P1-25 An Investigation regarding the Drinking Method in Hydration Therapy for Patients with Meniere’s Disease**  
Odahara N, Iwashita Y, Takada T, Hatta K, Naganuma H (Japan)
- P1-26 Hydration Therapy for Patients with Meniere’s Disease (The Second Report)**  
Naganuma H, Kawahara K, Tokumasu K, Ochiai A, Okamoto M (Japan)
- P1-27 Evaluation of Quality of Life after Intratympanic Streptomycin Injection in Patients with Meniere’s Disease**  
Kim SH, Jung J, Chun JY, Kim NY, Kim YH, Lee WS (Korea)
- P1-28 Results of Treatment for Acute Low Tone Hearing Loss (ALHL): Intra-Tympanic Steroid Injection as First Line Therapy**  
Choi SH (Korea)
- P1-29 Outcomes of Endolymphatic Sac Drainage and Steroid-instillation Surgery for Meniere’s Disease**  
Kimura Y, Manabe Y, Fujieda S (Japan)
- P1-30 Unsuspected Meniere’s Disease in Emergency Department Patients**  
Hornibrook J, Gawankar S, Gourley J, O’Beirne G (New Zealand)
- P1-31 Meniere’s Disease – Diagnostic, Treatment in International Center of Hearing and Speech in Poland**  
Skarzynski H, Tacikowska G, Sosna M, Krasnodebska P, Skarżyński PH (Poland)
- P1-32 Epidemiological Analysis of Meniere’s Disease: Role of Gender, Age and Ethnicity**  
Ohmen JD, White C, Fisher L, Wang J, Derebery J, Friedman RA (USA)
- P1-33 Analysis of Cases Undergoing Surgery for Perilymphatic Fistula**  
Miyao M, Nomura T, Urayama K, Yamamoto Y, Takahashi S (Japan)



- P1-34 Effects of a Perilymphatic Fistula on the Vibration of the Basilar Membrane**  
Hayashi K, Koike T, Kanzaki S, Ogawa K (Japan)
- P1-35 Two Cases of Alternobaric Vertigo and their Mechanisms**  
Toi T, Nomura Y, Ikeda A, Masuda T, Asakawa N, Iikuni F, Ikui A, Shigihara S, Ikeda M (Japan)
- P1-36 Clinical Management and Treatment of Perilymphatic Fistula. Clinical Series and Literature Review**  
Omi E, Koizumi K, Ishikawa K (Japan)
- P1-37 Delayed Endolymphatic Hydrops in a School-aged Child**  
Doi A, Kozakura K, Murai A, Shimamoto K, Morizane K, Tamura K, Tsutsui K, Nishimori Y, Motoyoshi A, Hasegawa K (Japan)
- P1-38 Positional Nystagmus of Horizontal Canalolithiasis**  
Ichijo H (Japan)
- P1-39 Benign Paroxysmal Positional Vertigo and Head Position during Sleep**  
Shigeno K, Ogita H, Funabiki K (Japan)
- P1-40 Auditory-pupillary Responses in Benign Paroxysmal Positional Vertigo**  
Kobayashi N, Kitajima N, Ogawa Y, Otsuka K, Inagaki T, Suzuki M (Japan)
- P1-41 The Head-tilt Hopping Exercise as a New Treatment Strategy for the Cupulolithiasis Associated with Horizontal Canal BPPV**  
Yamanaka T, Sawai Y, Murai T, Shimizu N, Okamoto H, Fujita N, Hosoi H (Japan)
- P1-42 Treatment of Geotropic Horizontal Canal Benign Paroxysmal Positional Vertigo; Comparison of Barbeque Rotation and Gufoni Maneuver**  
Oh S-Y, Kim JS, Lee S-H, Kang J-H, Kim D-U, Jeong S-H, Choi K-D, Moon I-S, Kim B-K, Lee JH, Oh HJ, Kim H-J (Korea)
- P1-43 Effect of Weather Conditions on the Onset of Vestibular Neuritis**  
Jeon EJ, Kim DH, Chang KH, Park YS (Korea)
- P1-44 Hearing Impairment due to Intracranial Hypotension**  
Taki M, Nin F, Hasegawa T, Sakaguchi H, Yamamoto S, Suzuki T, Hisa Y (Japan)
- P1-45 Hearing Preservation in Inner Ear Diseases Using Different Length of Electrodes**  
Skarzynski PH, Lorens A, Zgoda M, Piotrowska A, Skarzynski H (Poland)
- P1-46 The Molecular Mechanism of Autophagy in Auditory Cells under Oxidative Stress**  
Hayashi K, Dan K, Goto F, Kanzaki S, Ogawa K (Japan)
- P1-47 Espin Gene Transduction into Damaged Inner Ear Sensory Epithelia**  
Taura A<sup>1</sup>, Nakagawa T<sup>1</sup>, Ryan AF<sup>2</sup>, Ito J<sup>1</sup> (<sup>1</sup>Japan, <sup>2</sup>USA)
- P1-48 Hospital Anxiety and Depression Scale (HADS) Test for Balance Disorder Patients**  
Miwa T, Minoda R, Yumoto E (Japan)
- P1-49 Zinc in Combination with Steroid Therapy for the Treatment of Idiopathic Sudden Sensorineural Hearing Loss**  
Yang C-H, Ko M-T, Peng J-P, Hwang C-F (Taiwan)
- P1-50 Effect of Unilateral Intra-perilymphatic Infusion of Substance P or Substance P-derived Peptide (FGLM-NH<sub>2</sub>) on AMPA-induced Vestibulotoxicity in Guinea Pigs**  
Shimogori H, Toyota H, Takeno K, Orita H, Sugahara K, Yamashita H (Japan)



- P1-51 Intratympanic Steroids for Severe to Profound Sudden Sensorineural Hearing Loss as Salvage Treatment**  
Lee JD, Park MK, Lee C-K, Park KH, Lee BD (Korea)
- P1-52 Intracochlear Distribution of Intratympanically Injected Quantum Dot-Dexamethasone Nanocomplex in Rats and Analysis of the Hearing Recovery according to the Frequency in Sudden Sensorineural Hearing Loss**  
Goh E-K, Lee J, Lee I-W, Park S-H, Lee J-H, Myung N-S (Korea)
- P1-53 Mutant aav Type2 Improved the Efficiency of Gene Transfection in Cochlear of Guinea Pigs**  
Xia L, Yin S (China)
- P1-54 The Protective Effect of Resveratrol against the Hair Cell Degeneration Induced by Neomycin**  
Sugahara K, Mikuriya T, Hashimoto M, Shimogori H, Yamashita H (Japan)
- P1-55 The Effects of Sphingolipid Metabolites on Gentamicin-induced Hair Cell Death of the Rat Cochlea**  
Tabuchi K, Nishimura B, Nakamagoe M, Hara A (Japan)
- P1-56 Audiological, Immunohistochemical and Ultrastructural Analysis and Evaluation of the Effect of Acetyl L-Carnitine on Experimental Cisplatin Induced Ototoxicity**  
Güneri EA, Guneş D, Kırkım G, Özoğul C, Şerbetçioğlu B, Yılmaz O, Tufekci O, Kolatan E, Mutafoğlu K, Altun Z, Aktaş S, Erbayraktar Z, Olgun N (Turkey)
- P1-57 Age-related Changes of the Density of NMDA, Serotonin, GAD in the Central Auditory System of the Rat**  
Shim HJ, Lee LH, Yeo SG (Korea)
- P1-58 Posturography, and Audiometry in Patients with Diabetes Mellitus**  
Katayama N, Kato M, Fukunaga Y, Uchida Y, Sugiura S, Teranishi M, Sone M, Nakashima T (Japan)
- P1-59 Cooperative Functions of Hes/Hey Genes in Auditory Hair Cell and Supporting Cell Development**  
Tateya T, Imayoshi I, Tateya I, Ito J, Kageyama J (Japan)
- P1-60 Hedgehog Signaling Inhibits Hair Cell and Supporting Cell Differentiation in the Developing Auditory Sensory Epithelium**  
Tateya T, Imayoshi I, Tateya I, Ishibashi M, Ito J, Kageyama R (Japan)
- P1-61 Fibroblast Growth Factor Receptor 1 (FGFR1) Function in Inner Ear Hair Cell Development**  
Kita T, Honda A, Muta Y, Ladher RK (Japan)
- P1-62 Variable Audiovestibular Findings in Patients with Enlargement of the Vestibular Aqueduct Caused by Mutations of *SLC26A4*, *SIX1*, and *ATP6V1B1***  
Noguchi Y, Ito T, Nishio A, Honda K, Kitamura K (Japan)
- P1-63 *GJB2* Carrier Frequency in the Japanese Population**  
Taniguchi M, Kitajiri S, Matsuo H, Usami S, Ito J (Japan)
- P1-64 Evolutionary History of the Vertebrate *Ush1g* and *Otop* Gene Families Revealed by Comparative Sequence Analyses**  
Hurle B<sup>1</sup>, Marques-Bonet T<sup>1,2</sup>, Antonacci F<sup>1</sup>, Hughes I<sup>1</sup>, NISC Comparative Sequencing Program<sup>1</sup>, Eichler EE<sup>1</sup>, Ornitz DM<sup>1</sup>, Green ED<sup>1</sup> (<sup>1</sup>USA, <sup>2</sup>Spain)
- P1-65 Expression of Antioxidant Enzymes in Aged Mice**  
Hoshino T, Tabuchi K, Hara A (Japan)



- P1-66 High-speed Recording and Image Analysis of Outer Hair Cell Motility**  
Kitani R, Kalinec F (USA)
- P1-67 Roles of Protein Kinase A and C in the Bilirubin Potentiation of GABAergic/glycinergic Synaptic Transmission in Rat Ventral Cochlear Nucleus Neuron**  
Li C, Shi H, Yin S (China)
- P1-68 Auditory System Lesion in the Neonatal Guinea Pig Hyperbilirubinemia Model**  
Ye H, Yu D, Ding D, Shi H, Yin S (China)
- P1-69 Intrinsic Membrane Excitability of Purkinje Neurons in Vestibulocerebellum: Lobule-Specific Differences**  
Kim CH, Kim J, Lee JH, Oh SH, Kim SJ (Korea)
- P1-70 Effect of Morphological Cupula Change on the Ampullary Nerve Activity**  
Inagaki T, Suzuki M, Imura Y, Otsuka K, Shimizu S, Konomi U (Japan)
- P1-71 Neuro-otological Findings in Psychiatric Patients with Nystagmus**  
Kiyomizu K, Matsuda K, Toyama K, Ishida Y, Yoshida K, Tono T (Japan)
- P1-72 Square Drawing Test Recording with a Computer**  
Ogita H, Taura A, Funabiki K, Shimizu K, Hosomi Y, Ogino E, Ito J (Japan)
- P1-73 Activity of Pursuit-Related Neurons in Medial Superior Temporal Area (MST) during Static Roll-Tilt**  
Fujiwara K, Takeichi N, Fukuda S, Fukushima K (Japan)
- P1-74 Contribution of Visual Fixation & Habituation in Human Rotation**  
Shin S-H, Choi J-S, Choi H, Kim K-S (Korea)
- P1-75 Constitutive Expression of GlyCAM-1 Core Protein in Rat Inner Ear**  
Kanoh N (Japan)
- P1-76 Humoral Regulation to the Strial Na-K ATPase Activity in the Cochlea**  
Kanoh N (Japan)
- P1-77 Identification of TRPC3 in the Semicircular Canals and the Endolymphatic Sac**  
Sainoo Y, Terakado M, Takasaki K, Kumagami H, Takahashi H (Japan)
- P1-78 mRNA Expression of Claudins in the Rat Endolymphatic Sac**  
Matsubara A, Miyashita T, Mori T, Akiyama K, Inamoto R, Mori N (Japan)
- P1-79 Isoproterenol Elevates the Hydrostatic Pressure of the Ampullar Endolymph**  
Inamoto R, Miyashita T, Mori N (Japan)
- P1-80 Functional and Molecular Expression of Epithelial Sodium Channels in Cultured Human Endolymphatic Sac Epithelial Cells**  
Kim MB, Kim SH, Park HY, Choi HS, Chung HP, Choi JY (Korea)
- P1-81 Regulation of AQP2 and AQP3 in Immortalized Human ES Epithelial Cells**  
Moon SK, Woo JI, Cha K, Oh SJ, Folyan G, Lim DJ (USA)
- P1-82 Ingestion of Korean Red Ginseng after Noise Exposure can Potentiate Rapid Recovery of Hearing in Mice**  
Chung JW, Kang WS, Lim HW (Korea)





- P2-1 An Investigation of the Blood-Glucose-Level of the Patients with Meniere's Disease or Labyrinthine Vertigo in the Occasion of Their Vertiginous Attacks**  
Futaki T, Fukaya T (Japan)
- P2-2 Blockage of Longitudinal Flow in Meniere's Disease**  
Shimizu S<sup>1</sup>, Cureoglu S<sup>2</sup>, Yoda S<sup>1</sup>, Suzuki M<sup>1</sup>, Paparella MM<sup>2</sup> (<sup>1</sup>Japan, <sup>2</sup>USA)
- P2-3 Incidence of Neuro-imaging Abnormalities in Patients Presenting with Dizziness and/or Hearing Loss without Neurological Signs**  
Shigihara S, Nomura Y, Shigihara J, Masuda T, Ikeda A, Toi T, Miura M, Saito Y, Ikeda M (Japan)
- P2-4 Distortion Product Otoacoustic Emission in Evaluation of Hearing Impairment due to Exposure to Noise or Caused by Meniere's Disease**  
Abdi S, Tavakoli H (Iran)
- P2-5 The Association of the Plasma Vasopressin Level during Attacks with a Prognosis of Meniere's Disease**  
Aoki M, Hayashi H, Asai M, Kuze B, Mizuta K, Ito Y (Japan)
- P2-6 Predictive Factors for the Progression from Unilateral to Bilateral Meniere's Disease**  
Ushio M, Iwasaki S, Murofushi T, Egami N, Chihara Y, Fujimoto C, Sugasawa K, Yamasoba T (Japan)
- P2-7 Prognosis of Idiopathic Sudden Low-Tone Sensorineural Hearing Loss without Vertigo**  
Fushiki H, Junicho M, Asai M, Shojaku H, Watanabe Y (Japan)
- P2-8 Effects of Aerobic Exercise on Vertigo and Hearing Loss in Patients with Meniere's Disease**  
Takahashi M (Japan)
- P2-9 Clinical Effects of Transtympanic Micropressure Therapy Using Meniett<sup>R</sup> on Meniere's Disease**  
Aoki M, Nishihori T, Asai M, Kuze B, Mizuta K, Ito J, Miyata H (Japan)
- P2-10 Trans-tympanic Membrane Pressure Stimulation for the Treatment of Meniere's Disease**  
Watanabe Y, Shojyaku H, Jyunicho M, Asai M, Fujisaka M, Takakura H (Japan)
- P2-11 Efficacy of Postural Restriction in Treated Patient with Benign Paroxysmal Positional Vertigo**  
Sekine K, Sato G, Matuda K, Imai T, Takeda N (Japan)
- P2-12 Clinical Analysis of Horizontal Canal Benign Paroxysmal Positional Vertigo according to Spontaneous Nystagmus**  
Park HY, Choung Y, Park K (Korea)
- P2-13 A Case of the Vertigo with Neuro-Vascular Compression Syndrome**  
Shimizu T, Nakashima T, Kawamata H, Hinohira Y, Suzaki H (Japan)
- P2-14 Large Vestibular Aquaduct Syndrome with Different Aspect in Children**  
Kirkim G, Güneri EA, Serbetcioglu MB, Erdag TK, Güneri A (Turkey)
- P2-15 The Prevalence of Superior Canal Dehiscence Syndrome as Assessed on the Basis of Temporal Bone Computed Tomography Imaging**  
Masaki Y (Japan)
- P2-16 Vibration Dynamics of Bionic Auditory Membrane for a Novel Artificial Cochlea**  
Shintaku H, Kawano S, Nakagawa T, Ito J (Japan)
- P2-17 Recording Evoked Activity of Neocortical Neurons on Multi-electrode-array Substrates in Response to Output Signals from Bionic Auditory Membrane**  
Tsuchioka N, Shintaku H, Tateno T, Kawano S, Nakagawa T, Ito J (Japan)



- P2-18 Development of Bionic Auditory Membrane for Implantation into Cochleae of Guinea Pigs**  
Kanbe T, Shintaku H, Kawano S, Nakagawa T, Ito J (Japan)
- P2-19 Development of Bionic Cochlear Epithelium**  
Inaoka T, Nakagawa T, Shintaku H, Kawano S, Wada H, Hamanishi S, Yasuhiko T, Kumakawa K, Naito Y, Ito J (Japan)
- P2-20 Tinnitus-Specific Features in the Peripheral and Central Auditory System**  
Singer W, Rüttiger L, Zuccotti A, Matsumoto M, Panford-Walsh R, Köpschall I, Rohbock K, Zimmermann U, Knipper M (Germany)
- P2-21 Activation cGMP-cGKI Signaling Pathway by PDE5 Inhibition Preserves Cochlear Hair Cell Morphology and Hearing Function after Acoustic Injury in Rodents**  
Jaumann M<sup>1</sup>, Dettling J<sup>1</sup>, Gubelt M<sup>1</sup>, Zimmermann U<sup>1</sup>, Gerling A<sup>1</sup>, Feil S<sup>1</sup>, Wolpert S<sup>1</sup>, Brandt N<sup>1</sup>, Kuhn S<sup>1,2</sup>, Engel J<sup>1</sup>, Köpschall I<sup>1</sup>, Rohbock K<sup>1</sup>, Hütter J<sup>1</sup>, Sandner P<sup>1</sup>, Feil R<sup>1</sup>, Knipper M<sup>1</sup>, Rüttiger L<sup>1</sup> (<sup>1</sup>Germany, <sup>2</sup>UK)
- P2-22 Effect of IGF-1 in Vestibular Organ Exposed to Vestibulotoxicity**  
Angunsri N, Taura A, Nakagawa T, Kitajiri S, Omi E, Ishikawa K, Ito J (Japan)
- P2-23 Efficacy of Vasodilators in the Treatment of Acute Low-tone Sensorineural Hearing Loss**  
Kubo K, Sako M, Shibata S, Ohashi M, Komune S (Japan)
- P2-24 Acoustic Desensitization for Tinnitus during Sleep**  
Bayazit YA, Deniz H (Turkey)
- P2-25 Retrosigmoid Approach in the Removal of Vestibular Schwannoma**  
Kim JB, Lim YJ, Park MS, Lee HY, Yeo SG (Korea)
- P2-26 Microvascular Decompression for Tinnitus**  
Bayazit YA, Goksu N (Turkey)
- P2-27 Survival, Migration and Integration of Mouse Spiral Ganglion Neurons in Co-culture with Auditory Brain Stem Slices**  
Kaiser A<sup>1</sup>, Siratirakun P<sup>1,2</sup>, Thonabulsombat C<sup>1,2</sup>, Olivius P<sup>1</sup> (<sup>1</sup>Sweden, <sup>2</sup>Thailand)
- P2-28 Requirement of Fgf Signaling for Proper Cell Cycle Exit and Hair Cell Differentiation**  
Ono K, Kita T, Ladher RK (Japan)
- P2-29 Expression of PTEN in the Development of the Mammalian Auditory System**  
Dong Y, Sui L, Yamaguchi F, Kamitori K, Hirata Y, Suzuki A, Tokuda M (Japan)
- P2-30 Developmental Defects of Otic Fibrocytes and Stria Vascularis in a Mouse Model for DFN3 Hearing Loss**  
Song MH, Choi SY, Wu L, Oh SK, Lee HK, Shim DB, Choi JY, Kim UK, Bok J (Korea)
- P2-31 Clinical Aspects of Three Cases of Cochlear Nerve Deficiency**  
Miyanojara I, Miyashita K, Harada M, Kurono Y (Japan)
- P2-32 Clinical Features of CDH23 Mutations Found in Non-syndromic Hearing Loss Patients**  
Miyagawa M, Wagatsuma M, Nishio S, Usami S (Japan)
- P2-33 Vestibular Organs Express the Glutamine Transporters**  
Oguchi T<sup>1,2</sup>, Usami S<sup>2</sup>, Ottersen OP<sup>1</sup> (<sup>1</sup>Norway, <sup>2</sup>Japan)





- P2-34 Secondary Apoptosis of Spiral Ganglion Cells Induced by Aminoglycoside : ROS and JNK Signaling Pathway**  
Jeong SW, Kim LS, Bae WY (Korea)
- P2-35 Thermolysin Allows the Whole Mount Preparation of the Rat Endolymphatic Sac**  
Taguchi D, Gleiser C<sup>2</sup>, Hirt B<sup>2</sup>, Mueller A<sup>2</sup>, Eckhard A<sup>2</sup>, Mueller M<sup>2</sup>, Loewenheim H<sup>2</sup>, Kitano H<sup>1</sup> (1Japan, 2Germany)
- P2-36 Cholesterol of Outer Hair Cell Membrane Controls Cytoskeleton via G Protein Related Pathway**  
Nagaki T, Kakehata S, Kitani R, Abe T, Shinkawa H (Japan)
- P2-37 What is the Reason which the Ampulla has Closed by the Cupula?**  
Yamamoto M, Suzuki M, Yoshida T, Nomura T, Ikemiyagi Y, Shigeta F, Tamura Y, Kurose R, Komori S (Japan)
- P2-38 Analysis of Spontaneous Brain Activity in Tinnitus**  
Adachi T, Hiraumi H, Matsushashi M, Mima T, Ito J (Japan)
- P2-39 Vestibular- Somatosensory Interaction: A Near-Infrared Spectroscopy Study**  
Onuki J, Iida M, Yamamoto H, Sekine M, Haida M (Japan)
- P2-40 Subjective Visual Vertical during Eccentric Rotation in Patients with Vestibular Neuritis**  
Hong SM, Yeo SG, Byun JY, Park MS, Park CH, Lee JH (Korea)
- P2-41 Efficacy of Enzyme Linked Immunospot(ELISPOT) Assay Using Cryopreserved Cell in Detection of Inner Ear Antigen Specific T Cells in Patients with Autoimmune Sensorineural Hearing Loss**  
Baek MJ, Bang EK(Korea)
- P2-42 Inner Ear Disorders Observed in ANCA-associated Vasculitis**  
Yamazaki H, Naito Y, Shinohara S, Fujiwara K, Kikuchi M, Kanazawa Y, Kurihara R, Kishimoto I (Japan)
- P2-43 A Case of ANCA-associated Sensorineural Hearing Loss**  
Okada M, Ogawa H, Mukaigawa T, Hato N, Gyo K (Japan)
- P2-44 Changes of Hearing and Distortion Product Otoacoustic Emissions in Sudden Sensorineural Hearing Loss**  
Park HJ, Lee YJ, Park MS, Kim JM, Na BR, Shin JE (Korea)
- P2-45 Distribution of Caveolin 1 in the Mouse Inner Ear**  
Teranishi M, Suzuki H, Otake H, Nakashima T (Japan)
- P2-46 Distribution of Nestin-expressing Cells in Mature Mouse Cochleae and Its Alteration Following Noise-induced Damage**  
Watanabe R<sup>1,2</sup>, Raphael Y<sup>1</sup>, Miller J<sup>1</sup>, Ogawa K<sup>2</sup>, Altschuler R<sup>1</sup> (1USA, 2Japan)
- P2-47 Cell Transplantation and Tracing in Rats by Intra-auditory Nerve Trunk Delivery Approach**  
Palmgren B, Jin Z, Ma H, Kostyszyn B, Olivius P (Sweden)
- P2-48 Inner Ear Hair Cell Differentiation from Human Umbilical Cord Blood**  
Choi M-Y, Gil K-C, Park KH (Korea)
- P2-49 Sound Symbolic Words Describing Disequilibrium Symptoms**  
Murai N, Takahashi Y, Iguchi F, Taniguchi Z (Japan)
- P2-50 Effects of Vincristine on Hearing Threshold in Non-Hodgkin's Lymphoma Patients**  
Abdullah A, Noorizan Y, Mazita A, S Fadhillah AW (Malaysia)



- P2-51 Cochlear Implantation in Patients with Meniere's Disease**  
Cruise AS, Broomfield SJ, Sanli H, Gibson WPR (Australia)
- P2-52 Hypothetical Mechanism for Vertigo in Meniere Disease – The Drainage Theory**  
Gibson WPR, Broomfield SJ (Australia)
- P2-53 Effect of Furosemide in Patients with Meniere's Disease**  
Yamamoto H, Sunami K, Yamane H (Japan)
- P2-54 A Case of Basilar-type Migraine with Recurrent Vertigo**  
Sakaida H, Ogihara H, Takeo T, Takeuchi K (Japan)
- P2-55 Salicylate Induces Auditory Dysfunction by Activating Caspase-3 in the Hair Cells of Guinea Pig Cochlea**  
Feng H, Yin S-H (China)
- P2-56 Participation of Large Deletion/Insertion GJB6/GJB2 Genes in the Pathogenesis of Genetically Related Hearing Loss**  
Lechowicz U, Pollak A, Mueller-Malesińska M, Skórka A, Ołdak M, Korniszewski L, Skarzynski H, Płoski R (Poland)
- P2-57 Frequency of Mutations in GJB2 Gene among Patients with Other Risk Factors for Hearing Loss (HI)**  
Lechowicz U, Pollak A, Skórka A, Malesińska M, Oldak M, Skarzynski H, Korniszewski L, Płoski R (Poland)
- P2-58 Algorithm of Genetic Screening among Polish Patients with Hearing Loss**  
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- P2-59 Mutation Matched Chromosome Pool Analysis (MMCPA) as a Novel Method of Search for Novel Mutations: Validation and Application to Search for Unknown Mutation in GJB2 Region among Hearing Impaired**  
Pollak A, Skórka A, Lechowicz U, Malesińska M, Oldak M, Skarzynski H, Korniszewski L, Płoski R (Poland)
- P2-60 4 Cases of Incomplete Partition Type III**  
Cho H-K, Kim CS, Oh SH, Lee JH, Jang JH, Choi BY, Chang SO (Korea)
- P2-61 Otologic Manifestation of IgG4 Related Systemic Disease**  
Cho HK, Lee YJ, Chung J-H, Koo J-W (Korea)
- P2-62 MRI Findings in Labyrinthine Fistula Caused by Cholesteatoma and Implications in the Development of Inner Ear Disturbance**  
Um KM, Park DY, Hong SA, Chung T-S, Choi HS, Son EJ (Korea)
- P2-63 Antiviral Therapy in Patients with Meniere's Disease**  
Yoon YJ (Korea)
- P2-64 Expression of Osmotic Stress Protein 94 in the Murine Endolymphatic Hydrops Model**  
Kim YH, Choi BY, Lee HS, Lee JH, Oh SH (Korea)
- P2-65 Early Self-Administered Sustained Delivery of Intratympanic Steroid with Laser Myringotomy plus VT**  
Lee CH, Yoo CK (Korea)