



The Hong Kong
Neurosurgical Society



27th Annual Scientific Meeting (Virtual Conference)

SMART HOSPITAL AND ARTIFICIAL INTELLIGENCE IN NEUROSURGERY

Date /

18 - 19 December 2020

Time /

08:30 - 17:00

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WELCOME MESSAGE



Dear Guests, colleagues and friends,

As neurosurgeons, we are always handling the most delicate and indispensable system in our bodies. It pays to use the most advanced technologies, finesse of microsurgery, and the brightest minds, be it human or artificial intelligence, to treat the diseases of the brain. In the midst of COVID-19 pandemic this year, we stand with courage and run our first virtual Annual Scientific Meeting.

Our theme this year is "Smart Hospital and Artificial Intelligence in Neurosurgery". It is our great honour to have Dr. Neil A. Martin, the Former Chair of the Department of Neurosurgery, UCLA as our keynote speaker. He is currently the Director of Quality and Innovation in the Pacific Neuroscience Institute in Los Angeles, USA, as well as the Medical Director for Neuroscience for the 11 hospitals of the Southern California Providence Health System. Our next keynote speaker is Prof. Yoshihiro Muragaki of the Faculty of Advanced Techno-Surgery (FATS), Institute of Advanced Biomedical Engineering & Science, Tokyo Women's Medical University, Japan and he will share with us his advanced Hyper SCOT (Smart Cyber Operating Theatre).

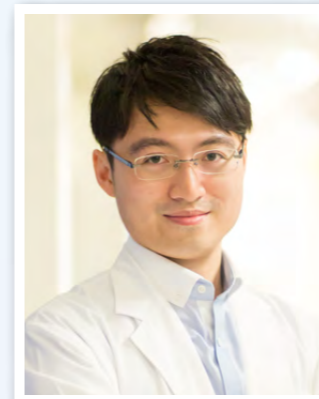
Our local speaker Dr. Gary Kui-Kai Lau, University of Oxford Croucher Scholar as well as the Director of the Stroke Research and Prevention Unit of the University of Hong Kong, will share his big data research in stroke. Besides, Prof. David Chuen-Chun Lam of the Department of Mechanical and Aerospace Engineering of the Hong Kong University of Science and Technology will present his big data research in predicting aneurysm rupture. Last but not the least, our invited speaker Dr. Walter C. Jean, Professor of Neurosurgery and Director of Skull Base Surgery at George Washington University, USA will introduce his virtual reality technology in planning, rehearsal and navigation, to achieve the optimal skull base exposure for resection of tumours.

Finally, I would like to take this opportunity to thank Dr. Calvin Mak and the organizing committee, the Secretariat, all helpers, the commercial sponsors, and all of you who participate. I hope all of you would find the programme interesting and useful to your practice and have a fruitful and safe weekend.



Dr. Michael Lee
President
The Hong Kong Neurosurgical Society

WELCOME MESSAGE



Dear guests, members, and friends,

It is my honor to announce the commencement of our 27th Annual Scientific Meeting of the Hong Kong Neurosurgical Society. This is the first ever virtual ASM we have ever held, amid the global pandemic situation. Coincidentally, it resonates with our theme this year – "Smart Hospital and Artificial Intelligence in Neurosurgery", using technology in our neurosurgical practice and knowledge exchange.

We are glad to have invited an unprecedented number of speakers, including Prof. Neil Martin and Prof. Yoshihiro Muragaki as our keynote speakers, alongside with Prof. Walter Jean, Prof. David Lam and Dr. Gary Lau as invited speakers. They are going to share their wisdom and insight on how artificial intelligence will impact on neurosurgery and what it takes to build a smart neurosurgical center. We also have two new sessions from the Spine Chapter and Stereotactic Radiosurgery Chapter of the HKNS, to give us highlights and plans of future development.

I would like to express my sincere thanks to all the speakers, the Organizing Committee, IT Subcommittee, secretariat staff, and all of you for making this a successful and memorable event, in this special year of 2020.

Hope to see you all in person in 2021, and stay healthy!

Dr. Calvin MAK
Honorary Secretary

ORGANIZING COMMITTEE

Council Members & Organising Committee

President : Dr. Michael LEE
 Vice President : Dr. Sui-to WONG
 Honorary Secretary : Dr. Calvin MAK
 Honorary Treasurer : Dr. Jason CHOW
 Council Members : Dr. David CHAN
 Dr. Alberto CHU
 Dr. Lai-fung LI
 Dr. Kar-ming LEUNG
 Dr. Yin-chung PO

IT Subcommittee

Dr. Jason HO (Team Leader)
 Dr. Ben NG
 Dr. Michael SEE

Audio-visual support

The Federation of Medical Societies of Hong Kong

Photographer

Ms Amelia YUNG

GUEST FACULTIES

The Organising Committee would like to thank the following guest faculties for their invaluable contributions to the 27th Annual Scientific Meeting

Dr. Neil A. MARTIN

Director of Innovation and Quality
 Pacific Neuroscience Institute and
 Providence Saint John's Health Center in Santa Monica, California
 Regional Medical Director of Neuroscience for Provident Southern California, USA

Prof. Yoshihiro MURAGAKI

Faculty of Advanced Techno-Surgery
 Institute of Advanced Biomedical Engineering and Science
 Graduate School of Medicine
 Department of Neurosurgery, Neurological Institute
 Tokyo Women's Medical University, Japan

Prof. Walter JEAN

Professor
 Department of Neurosurgery
 George Washington University, Medical Faculty Associates, Washington D.C., USA

Prof. David LAM

Professor
 Department of Mechanical and Aerospace Engineering
 The Hong Kong University of Science and Technology

Dr. Gary LAU

Clinical Assistant Professor
 Division of Neurology, Department of Medicine
 LKS Faculty of Medicine, The University of Hong Kong

Dr. David SUN

Hospital Chief Executive/Neurosurgeon
 North District Hospital

Dr. Kwong-yui YAM

Neurosurgeon/Chief of Service
 Department of Neurosurgery
 Tuen Mun Hospital

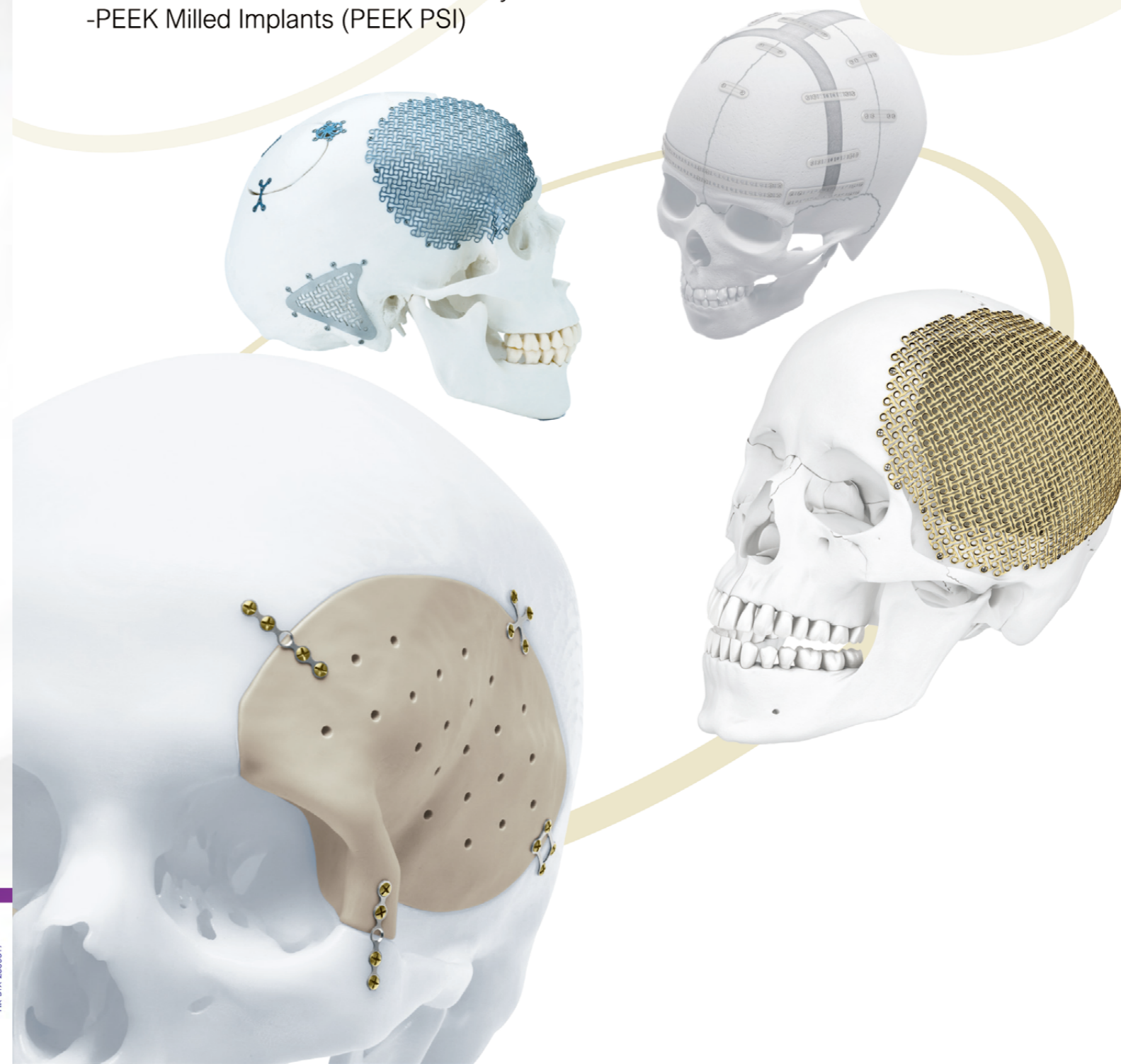
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GUEST FACULTY



Dr. Neil A. MARTIN

Director of Quality and Innovation
Pacific Neuroscience Institute
Santa Monica, California
USA

Dr. Martin worked at UCLA as Chair of the Department of Neurosurgery, which was founded under his leadership in 2008. Dr. Martin also served as Co-Director of the Brain Injury Research Center, and Co-Director of the UCLA Stroke Center. He has published more than 300 scientific/clinical articles and conducted NIH-funded research in cerebral blood flow and metabolism, neurosurgical critical care, and minimally invasive neurosurgery. In January, 2017, Dr Martin moved to Danville, Pennsylvania as Director of the Geisinger Neuroscience Institute, which includes the Departments of Neurology, Neurosurgery, Psychiatry, and Otolaryngology. He also served as Chief Quality Officer for the Geisinger Health System. He collaborated in clinical neuroscience research with the MyCode population genomics team. After three years at Geisinger, Dr Martin returned to Los Angeles, where he joined founder Dan Kelly, MD, in the Pacific Neuroscience Institute, as Director of Quality and Innovation. He also has a system role as Medical Director for Neuroscience for the 12 hospitals of the Southern California Providence Health system.

Honors and Awards

1976	Robert C. Bryan Prize in Pathology, Department of Pathology, Medical College of Virginia
1977	A.D. Williams Scholarship (First in Medical School Clinical Rotations)
1977 – 1978	Alpha Omega Alpha (President) Medical College of Virginia
1984	Henry Newman Award, San Francisco Neurological Society
1991	Visiting Professor University of Miami Department of Neurological Surgery
1991	Visiting Professor Allegheny General Hospital Department Neurological Surgery
1991	Visiting Professor University of Washington Department of Neurological Surgery
1991	Second Place – Poster presentation – American Association of Neurological Surgeons
1991	Honorable Mention – Poster presentation – Congress of Neurological Surgeons
1994	Named in “The Best Doctors in America 1994-1995” (Vascular Neurosurgery Section), Woodward White, Inc., Aiken, South Carolina
1994	First place – Poster presentation – Annual Meeting of the Congress of Neurological Surgeons, 1994: Shalmon E, Hovda D, Caron M, Martin N, Iocolano S, Blander E, Becker D: Cerebral metabolism in severe head-injured patients: a question of ischemia
1996	Named in “The Best Doctors in America: Pacific Region 1996-1997”, Woodward White, Inc., Aiken, South Carolina
1996	Named in November issue of Los Angeles Magazine “The Best Doctors in Los Angeles”
1996	2 nd Prize – Trauma Resident Paper Competition, Southern California Committee on Trauma, December 2, 1996: Lee J, Martin N, Alsina G, MacArthur D, Zaucha K, Hovda D, Becker D: Hemodynamically significant cerebral vasospasm and outcome following head injury: a prospective study.
2001	“Stars for Stroke” award, honored for contributions to stroke care, with the UCLA Stroke Center Co-Directors, by the National Stroke Association
2003	Named in “Best Heart (and Stroke) Doctors” Good Housekeeping, 1996 Named in “Best Doctors in America 2003-2004” database
2006	Named Honorary Member of the Frank H. Mayfield Society
2006	Superior Wireless Achievement 3G A-List Award
2007	Mobile Enterprise Award, Recipient

GUEST FACULTY



Prof. Yoshihiro MURAGAKI

Professor
Faculty of Advanced Techno-Surgery, Tokyo Women’s Medical University
Japan

He was a certified neurosurgeon from 1992 at the department of Neurosurgery, Tokyo Women’s Medical University and an associate professor from 2009 at the Faculty of Advanced Techno-Surgery, Tokyo Women’s Medical University. He has been a Professor in the same faculty from 2011. He engages in brain tumor treatment, intraoperative MRI, and regulatory science. Dr. Muragaki is a member of Japanese Neurosurgical Society, the Japan Society for Neuro-Oncology, and Japanese Society for Medical and Biological Engineering. His award and honors include the Japan Open Innovation Prize, Chunichi Industrial Award, Robot Award, Microsoft Innovation Award and Sankei High-Tech Award.

Education

1986	M.D. degree from Kobe University
1997	Ph.D. degree in Medical Science from Tokyo Women’s Medical College
2014	Ph.D. degree in BioMedical Science from Waseda University

GUEST FACULTY



Prof. Walter JEAN

Professor, Department of Neurosurgery
 Director, Skull Base Neurosurgery
 Associate Program Director, Neurosurgery Residency Program
 George Washington University, Medical Faculty Associates, Washington, D.C.
 USA

Education

1989 Princeton University, Princeton, NJ
 1993 Cornell University Medical College, New York, NY

Former Positions

2001 - 2016 Professor, Departments of Neurosurgery, Radiation Medicine & Otolaryngology,
 Georgetown University, School of Medicine, Washington, D.C.
 Director, Surgical Neuro-Oncology
 Director, Skull Base Neurosurgery
 2004 - 2016 Graduate Medical Education Committee, Georgetown University Hospital
 2010 - 2016 Program Director, Neurosurgery Residency Program

Certification

2004 Diplomate, American Board of Neurological Surgery
 Board of Medicine, District of Columbia, License
 Board of Medicine, Virginia, License
 Board of Physicians, Maryland, License

Major Awards/Honors

1989 George Khoury 1965 Senior Prize for academic excellence, Princeton University
 1989 Sigma Xi, scientific research honor society, Princeton University
 1989 Phi Beta Kappa, Princeton University
 1991 Alpha Omega Alpha, medical honor society, Cornell University Medical College
 1993 The John Metcalf Polk Prize for General Efficiency - highest academic honor,
 Cornell University Medical College
 1997 The Preuss Resident Research Award, Joint Sections on Tumors, Congress of Neurological
 Surgeons and American Assoc. of Neurological Surgeons
 1998 The Peyton Award for Outstanding Presentation of Scientific Investigation,
 University of Minnesota Medical School, Department of Neurosurgery
 1998 The Seljeskog Award for Outstanding Resident Publication,
 University of Minnesota Medical School, Department of Neurosurgery

GUEST FACULTY



Prof. David LAM

Professor
 Department of Mechanical and Aerospace Engineering
 Hong Kong University of Science and Technology

Prof. David CC LAM founded the advanced stroke treatment technology program and the endoluminal system (ES) group with Prof. John CK KWOK. The ES group develops endoluminal thrombectomy devices to treat ischemic stroke and accelerated drainage systems to treat cerebral hematoma. The group works with HADCL and develops new integrated tests and AI indices to support aneurysm rupture risk assessment. Prof. Lam is leading the ocular system (OS) group concurrently with Prof. M-B YU. The OS group develops wearable sensors, AI diagnostic systems, and ocular drug delivery devices to treat eye diseases. In industrial engagements, Prof. Lam promotes and supports sensing and big data acquisition for AI systems to improve complex systems in industries to reduce pollution in Hong Kong. Prof. LAM is a professor in the Department of Mechanical and Aerospace Engineering in HKUST.

GUEST FACULTY



Dr. Gary LAU

Clinical Assistant Professor, Division of Neurology, Department of Medicine, LKS Faculty of Medicine, The University of Hong Kong
 Honorary Associate Consultant, HKU-Shenzhen Hospital, Shenzhen
 Honorary Specialist, Division of Neurology, Department of Medicine, Hong Kong West Cluster of Hospitals, Hong Kong
 Honorary Research Fellow, Sao Po Centre on Ageing, The University of Hong Kong
 Principal Investigator, The State Key Laboratory of Brain and Cognitive Sciences, The University of Hong Kong

Qualifications and Appointments

Academic Qualifications

- 2008 M.B.,B.S., LKS Faculty of Medicine, The University of Hong Kong MRes (Med), LKS Faculty of Medicine, The University of Hong Kong
 (Supervisors: Professor Hung Fat Tse and Professor Chu Pak Lau, Division of Cardiology, Department of Medicine, LKS Faculty of Medicine, HKU)
- 2018 Doctor of Philosophy in Clinical Neurosciences, University of Oxford
 (Supervisor: Professor Peter Rothwell, Centre for Prevention of Stroke and Dementia, Nuffield Department of Clinical Neurosciences, University of Oxford)

Professional Qualifications

- 2011 Member of the Royal College of Physicians (UK) Member of Hong Kong College of Physicians
- 2015 Fellow of the Hong Kong College of Physicians (Neurology)
- 2016 Fellow of the Hong Kong Academy of Medicine (Medicine)
 Associate Fellow of Higher Education Academy (UK)
- 2018 Fellow of European Stroke Organisation
- 2019 Fellow of Royal College of Physicians (Edinburgh, UK)
- 2019 Fellow of Royal College of Physicians (Glasgow, UK)

Academic Positions

- 2011 - Present Clinical Assistant Professor, Division of Neurology, Department of Medicine, LKS Faculty of Medicine, HKU
- 2015 - 2017 Clinical Research Fellow, Centre for Prevention of Stroke and Dementia, Nuffield Department of Clinical Neurosciences, University of Oxford

Honorary Appointments

- 2015 - present Honorary Specialist, Department of Medicine, Hong Kong West Cluster of Hospitals, Hospital Authority, Hong Kong
- 2016 - present Honorary Research Fellow, Sao Po Centre on Ageing, The University of Hong Kong
- 2019 - present Honorary Associate Consultant, HKU-Shenzhen Hospital, Shenzhen

GUEST FACULTY



Dr. David SUN

Hospital Chief Executive of North District Hospital
 Honorary Clinical Associate Professor, Department of Surgery, The Chinese University of Hong Kong

David graduated from the Chinese University of Hong Kong. He received his Neurosurgical training in Hong Kong and Spine Clinical Fellowship in Toronto Western Hospital in Canada. His special interests include minimally invasive spine surgeries, spinal cord injury, intracerebral hemorrhage, neurovascular surgery for stroke, and neurorehabilitation. He is currently Hospital Chief Executive of North District Hospital and Honorary Clinical Associate Professor in Department of Surgery, the Chinese University of Hong Kong.

Before picking up the full time administrative position in 2016, he played an integral role in Spine, Cerebral revascularization and Neurorehabilitation Services in the Division of Neurosurgery of Prince of Wales Hospital. He was also the convener of Hong Kong Neurosurgical Spine Interest Group, Founding Chairman of Hong Kong Pain Foundation, and Expert Advisory Panel of International Spine Committee in World Federation of Neurosurgical Societies. He was invited speaker in various International Conferences and training faculty in many workshops organized by AO Spine and International Spine Committee of WFNS. He received Exceptional Achievement Award by the International Spine Committee of WFNS in 2012.

Lately David remains actively involved in promoting Spine Surgery and Pain patient care development in Hong Kong.

GUEST FACULTY



Dr. Kwong-yui YAM

Chief of Service, Consultant Neurosurgeon, Tuen Mun Hospital

Education

1986	MBBS (Hong Kong)
1991	FRCS (Edinburgh)
1993	FCS (Hong Kong)
1993	FHKAM (Surgery)

Working Experience

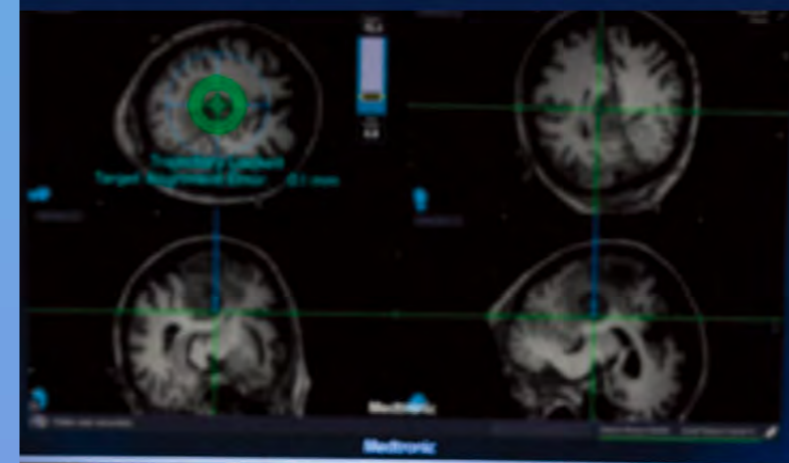
1987	Medical Officer, Thoracic Surgical Unit, Kowloon Hospital
1988	Medical Officer, Orthopaedic and Traumatology Unit, Queen Elizabeth Hospital
1989	Medical Officer, Government Surgical Unit, Queen Mary Hospital
1990 - 1992	Medical Officer, Neurosurgical Unit, Queen Elizabeth Hospital
1992 - 1996	Senior Medical Officer, Neurosurgical Unit, Queen Elizabeth Hospital
1996 - 2014	Consultant Neurosurgeon, Department of Neurosurgery, Tuen Mun Hospital
2014 - Present	Chief of Service, Department of Neurosurgery, Tuen Mun Hospital

Professional Society

2001	World Federation of Neurosurgical Societies Fellow
2001 - 2012	Foundation fellow and Council Member, Hong Kong Epilepsy Society
2006 - 2010	Hon. Treasurer, The Hong Kong Neurosurgical Society
2010 - 2012	Vice-President, The Hong Kong Neurosurgical Society
2012 - 2016	President, The Hong Kong Neurosurgical Society
2015 - 2018	Hospital Authority Neurosurgery COC Chairman
2019	College of Surgeons Hong Kong Neurosurgery Board Chairman

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PROGRAMME AT-A-GLANCE

Time	18 December 2020 (Friday)
8:30 am – 8:40 am	Welcome Speech - Dr. Michael LEE
8:40 am – 9:20 am	Keynote Lecture I - Dr. Neil A. MARTIN Development of a Smart Neurosurgical Center – Innovation and Challenges Chairpersons: Dr. KH CHAN, Prof. W POON
9:20 am – 9:50 am	Keynote Lecture II - Dr. Neil A. MARTIN Telemedicine and Neurosurgery Chairpersons: Dr. Dawson FONG, Dr. Alain WONG
9:50 am – 9:56 am	Tea Break
9:56 am – 10:46 am	Free Paper I Chairpersons: Dr. Jason CHOW, Dr. SW LEE
10:46 am – 10:56 am	HKNS & COC Commissioned Research: Dr. Victor HUI A Territory-wide Review of Clinical Outcome in Geriatric Head Injury Chairpersons: Dr. KY PANG, Dr. SC YUEN
10:56 am – 11:02 am	Tea Break
11:02 am – 11:42 am	Keynote Lecture III - Dr. Neil A. MARTIN Applications of Intraoperative imaging in neurosurgery Chairpersons: Dr. Calvin MAK, Dr. HT WONG
11:42 am – 12:22 pm	Free Paper II Chairpersons: Dr. CC WONG, Dr. Larry WONG
12:22 pm – 1:22 pm	Lunch break & Symposium
12:55pm – 1:22 pm	Lunch Symposium - Prof. John ADLER The Future of Stereotactic Radiosurgery (SRS) Chairpersons: Dr. CK Wong, Prof. George WONG
1:22 pm – 1:28 pm	Tea Break
1:28 pm – 1:58 pm	Spine Chapter Lecture - Dr. David SUN Past, Present and Future of HKNS Spine Chairpersons: Dr. David CHAN, Dr. Michael LEE
1:58 pm – 2:33 pm	Free Paper III (Video Session) Chairpersons: Dr. ST CHAN, Dr. Daniel NG
2:33 pm – 3:23 pm	Free Paper IV Chairpersons: Dr. HM CHIU, Dr. CP TSANG
3:23 pm – 3:53 pm	Invited Lecture IV - Dr. Gary LAU Use of big datasets and artificial intelligence to improve outcomes in patients with stroke Chairpersons: Dr. YT KAN, Dr. LF LI
3:53 pm – 4:33 pm	Free Paper V Chairpersons: Dr. KM CHENG, Dr. TC TAN

PROGRAMME AT-A-GLANCE

Time	19 December 2020 (Saturday)
9:00 am – 9:40 am	Keynote Lecture V - Prof. Yoshihiro MURAGAKI Hyper SCOT Chairpersons: Dr. YW FAN, Dr. Michael LEE
9:40 am – 10:20 am	Keynote Lecture VI - Prof. Yoshihiro MURAGAKI Use of AI in neurosurgery Chairpersons: Dr. Clarence LEUNG, Dr. WM LUI
10:20 am – 10:50 am	Invited Lecture VII - Prof. Walter JEAN AR/VR in neurosurgical operations Chairpersons: Dr. Calvin MAK, Dr. WK WONG
10:50 am – 10:56 am	Tea Break
10:56 am – 11:46 am	Free Paper VI Chairpersons: Dr. WM HUNG, Dr. YC PO
11:46 am – 12:16 pm	Free Paper VII Chairpersons: Dr. PH CHAN, Dr. YH TSE
12:16 pm – 12:46 pm	Keynote Lecture VIII - Prof. Yoshihiro MURAGAKI Innovative treatment of glioma Chairpersons: Dr. Danny CHAN, Dr. MK LAM
12:46 pm – 1:46 pm	Lunch break & Symposium
1:00 pm – 1:15 pm	Video Talk - Dr. Vivek MEHTA Initial Clinical Experience with cranial robotic guidance platform
1:20 pm – 1:40 pm	Lunch Symposium - Prof. Dietmar KREX Navigation and digitalization in the neurosurgical OR – pretense and reality; Some experience from a long-term user Chairpersons: Dr. FC CHEUNG, Dr. KM LEUNG
1:46 pm – 1:52 pm	President's message
1:52 pm – 3:22 pm	Nursing Session Chairpersons: Ms Shu-wah CHAU, Ms Kin-yee LO
3:22 pm – 3:52 pm	SRS Chapter Lecture - Dr. Kwong-yui YAM Stereotactic Radiosurgery Chapter – the way forward Chairpersons: Dr. Michael LEE, Dr. CP YU
3:52 pm – 4:22 pm	Invited Lecture IX - Prof. David LAM Big Data Insights in Cerebral Aneurysm Rupture in Hong Kong Chairpersons: Dr. Alberto CHU, Dr. Derek WONG
4:22 pm – 4:28 pm	Tea Break
4:28 pm – 4:58 pm	Free Paper VIII Chairpersons: Dr. KH PANG, Dr. ST WONG
4:58 pm – 5:08 pm	Concluding Remarks

PROGRAMME : FREE PAPER SESSIONS DAY 1

Sessions on 18 December 2020

Free Paper I - Tumor

Chairpersons: *Dr. Jason CHOW & Dr. SW LEE*

9:56 a.m. - 10:06 a.m.	The making of a biopsy forcep with a flexible tip for pineal region tumors: a collaboration between neurosurgeons and engineers	<i>Pak-to YUEN</i>
10:06 a.m. - 10:16 a.m.	The diagnostic accuracy of frameless stereotactic biopsy: a review 106 biopsy procedures	<i>Zhexi HE</i>
10:16 a.m. - 10:26 a.m.	Retrospective analysis of patient outcomes in awake craniotomies with intraoperative monitoring	<i>Chat-fong NG</i>
10:26 a.m. - 10:36 a.m.	Morphometric Analysis of Anatomy in Anterior Petrosectomy Using Computed Tomography	<i>Wing-lok CHEUNG</i>

HKNS & COC Commissioned Research

Chairpersons: *Dr. KY PANG & Dr. SC YUEN*

10:46 a.m. - 10:56 a.m.	A Territory-wide Review of Clinical Outcome in Geriatric Head Injury	<i>Victor Ka-ho HUI</i>
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Free Paper II - Tumor

Chairpersons: *Dr. CC WONG & Dr. Larry WONG*

11:42 a.m. - 11:52 a.m.	Outcome of extended endoscopic endonasal transsphenoidal surgery for patients with suprasellar tumor in 20 consecutive patients	<i>Ling-kit CHEUNG</i>
11:52 a.m. - 12:02 p.m.	Pharmacological inhibition of PHGDH enhances temozolomide efficacy via decreasing MGMT expression and ROS-induced DNA damage in glioblastoma cells	<i>Lei JIN</i>
12:12 p.m. - 12:22 p.m.	Early Experience with Tumor Treating Fields for Glioblastoma in Hong Kong: Interim Prospective Observational Study Analysis	<i>Peter Yat-ming WOO</i>

PROGRAMME : FREE PAPER SESSIONS DAY 1

Sessions on 18 December 2020

Free Paper III (Video Session)

Chairpersons: *Dr. ST CHAN & Dr. Daniel NG*

1:58 p.m. - 2:33 p.m.	Excision of a Midbrain Cavernoma by Supracerebellar Approach	<i>Wing-lok CHEUNG</i>
	Mapping of the supplementary motor area in awake craniotomy for focal cortical dysplasia	<i>Joyce Shuk-wan CHOW</i>
	Transorbital Approach to Sphenoidal Ridge meningioma	<i>Chat-fong NG</i>
	Endoscopic Clipping of Moyamoya Disease Associated Pseudoaneurysm	<i>Tak-lap POON</i>
	Teflon-free Microvascular Decompression Using Arachnoid Sling	<i>Wing-lok CHEUNG</i>
	Laparoscopic Excision of Sacral Schwannoma	<i>Chat-fong NG</i>

Free Paper IV - Functional

Chairpersons: *Dr. HM CHIU & Dr. CP TSANG*

2:33 p.m. - 2:43 p.m.	Image Guided Deep Brain Stimulation (DBS) Programming in Patients with Parkinson's Disease (PD)	<i>Germaine Hiu-fai CHAN</i> <i>Tak-lap POON</i>
2:43 p.m. - 2:53 p.m.	Leksell Vantage, the future of stereotactic neurosurgery?	<i>Dawnie Ho-hei LAU</i>
2:53 p.m. - 3:03 p.m.	Spinal Cord Stimulation is Effective for Advanced Parkinson's Disease with DBS	<i>David Yuen-chung CHAN</i>
3:03 p.m. - 3:13 p.m.	Subthalamic nucleus (STN) deep brain stimulation (DBS) under Local anaesthesia (LA) Vs General anaesthesia (GA) for Patients with Parkinson's disease: What is the way ahead?	<i>Xian-lun ZHU</i>
3:13 p.m. - 3:23 p.m.	A case series of outcomes in patients receiving resective surgery for extratemporal epilepsy	<i>Victor Ka-ho HUI</i>

Free Paper V - Vascular

Chairpersons: *Dr. KM CHENG & Dr. TC TAN*

3:53 p.m. - 4:03 p.m.	Effect of revascularization surgery on the cognitive function in patients with cerebral hypoperfusion	<i>Ling-kit CHEUNG</i>
4:03 p.m. - 4:13 p.m.	Two decades of experience in surgical revascularization of Moyamoya disease	<i>Christopher Hiu-fung SUM</i>
4:13 p.m. - 4:23 p.m.	Predicting Factors of good outcome of mechanical thrombectomy in anterior circulation stroke	<i>Saori TAKEMURA</i>
4:23 p.m. - 4:33 p.m.	Effect of revascularization procedures of cognitive function	<i>Chat-fong NG</i>

PROGRAMME : FREE PAPER SESSIONS DAY 2

Sessions on 19 December 2020

Free Paper VI - Vascular

Chairpersons: *Dr. WM HUNG & Dr. YC PO*

10:56 a.m. - 11:06 a.m.	Does neck remnant matter? A study of vascular factors associated with progression of endovascularly treated intracranial aneurysms	<i>Carmen YIM</i>
11:06 a.m. - 11:16 a.m.	Management of Giant/ Large intracranial aneurysm: A Single Centre Experience	<i>Ronald LI</i>
11:16 a.m. - 11:26 a.m.	Long term neurovascular outcome after flow diverter for unruptured aneurysm or residual neck of previously ruptured aneurysm: A single centre experience in Hong Kong	<i>Jennie Shu-yan YEUNG</i>
11:26 a.m. - 11:36 a.m.	Carotid artery stenting and angioplasty in radiation-induced carotid artery stenosis	<i>Eric Yuk-hong CHEUNG</i>
11:36 a.m. - 11:46 a.m.	Case report: Coil Embolization thorough a Liquid Embolic Delivery Microcatheter (Marathon®)	<i>Hing-chi WONG</i>

Free Paper VII - General

Chairpersons: *Dr. PH CHAN & Dr. YH TSE*

11:46 a.m. - 11:56 a.m.	Burr Hole Localization and Ventricular Catheterization Accuracy for Ventriculoperitoneal Shunts: A Clinico-anatomical Study of Standard Approaches	<i>Desiree KK WONG</i>
11:56 a.m. - 12:06 p.m.	Vitamin D, a novel treatment for intracerebral hemorrhage: a preclinical study	<i>Yin CHENG</i>
12:06 p.m. - 12:16 p.m.	Health-related quality of life of patients with glioblastoma multiforme receiving post-operative concomitant chemoradiotherapy: a prospective longitudinal study	<i>Kevin Kai-Fung SUEN</i>

Free Paper VIII - Radiosurgery

Chairpersons: *Dr. KH PANG & Dr. ST WONG*

4:28 p.m. - 4:38 p.m.	Stereotactic radiosurgery for intracranial meningioma - a 10-year review	<i>Ka-wing SEE</i>
4:38 p.m. - 4:48 p.m.	Stereotactic Radiosurgery on Large Brain Arteriovenous Malformation: A single-centre experience	<i>Jason Man-kit HO</i>
4:48 p.m. - 4:58 p.m.	Follow up analysis of patients received frameless Stereotactic Radiosurgery for brain metastasis in a regional Neurosurgical Centre	<i>Shek-ching LAM</i>

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PROGRAMME: POSTER PRESENTATION 18-19 DECEMBER 2020

Ref. No.	Title	Author
P01	The Clinical Importance of ADD3 in Glioblastoma	<i>Mei-yee KIANG</i>
P02	Vitamin D3 as a possible therapeutic agent for promoting remyelination after intracerebral haemorrhage	<i>Katrina Cheuk-wai CHAU</i>
P03	Does pantoprazole lead to a reduced clopidogrel antiplatelet function? A single centre retrospective study	<i>Ben Kin-long LUK</i>
P04	Cerebral mast cells as a potential therapeutic target in intracerebral hemorrhage	<i>Andrian CHAN</i>
P05	Radiological Latency in Pineal Germinoma; a Case Report and Literature Review	<i>Ivan Chi-hin SIU</i>
P06	The role of CXCR3 (chemokine (C-X-C motif) receptor 3) in intracerebral hemorrhage	<i>Anson Cho-kiu NG</i>
P07	Muscle synergies retrieved by multi-muscle electromyographic responses from direct brain stimulations applied during awake brain surgery	<i>Jodie XIE</i>
P08	SMART syndrome mimicking glioblastoma recurrence 6 years after surgical excision and radiotherapy: A Case Report	<i>Wui-chung POON</i>
P09	Dural arteriovenous fistula at the lateral foramen magnum: A report of 2 microsurgical cases	<i>Him-pui LAW</i>
P10	An NF-1 patient with multiple spinal tumors and cord compression: is MRI adequate as a diagnostic method?	<i>Jasmine Wen-zhe YE</i>
P11	Predictive factors for development of bleeding carotid artery pseudoaneurysms in patients with previous radiations for head and neck cancers: a retrospective cohort of 32 cases	<i>Zhexi HE</i>
P12	Brain abscess associated with asymptomatic pulmonary arteriovenous malformations: Case report and review of literature	<i>Wing-hong JIM</i>
P13	Predictive Factors of Difficult Tracheostomy Weaning and Neurological and Hospital Outcomes of Neurosurgical Patients	<i>Hannaly Cheuk-hang LUI</i>
P14	A rare case of spinal epidural abscess (SEA) in a healthy teenage girl without risk factor: case report and literature review	<i>Yee-ting LEE</i>
P15	ICG-assisted endoscopic transorbital resection of orbital apex cavernous hemangioma – First reported case	<i>Hon-kwan CHAN</i>
P16	Case report of 2 children with sectioning of filum in occult cord tethering presenting with neurogenic bladder	<i>Ryan Wing-yan TSUI</i>
P17	Skull Base Tumours, A Single Centre Experience	<i>Alexander WOO</i>
P18	A Case Report of Intracranial Angiomatoid Fibrous Histiocytoma: The first case in Asia and of the oldest ages so far	<i>Yin-man CHAN</i>
P19	Preliminary technique and planning of a cost effective customised cranioplasty implant using 3D printing and bone cement	<i>Lusanda Long-ching TANG</i>
P20	Case series on effect of Transcranial Magnetic Stimulation on motor recovery after spinal insult	<i>Jackie Sze-fai LO</i>

PROGRAMME: POSTER PRESENTATION 18-19 DECEMBER 2020

Ref. No.	Title	Author
P21	Conus perimedullary arteriovenous fistulae: case report	<i>Andi Yin-chung CHAN</i>
P22	Erdheim-Chester Disease: a case report and role of Neurosurgery in ECD	<i>Gabriel Ka-kei WAI</i>
P23	Bilateral Globus Pallidus Internus (GPi) Deep Brain Stimulation (DBS) for a 4 year-old girl with GNAO1 Mutation Related Status Dystonia: Case Report and Literature Review	<i>Hilary KWOK</i>
P24	The Era of "New Normal": Mobile Learning Platform "Classroom" Paving the Way for Specialty Training of Millennial Staff in Neurosurgical Unit	<i>Chung-man HO</i>
P25	Engaging patient and caregivers into a comprehensive and multidisciplinary fall prevention program SAFE is effective in reducing the number of fall incidence	<i>Chung-man HO</i>
P26	Vitamin D Enhances Temozolomide Anti-Tumour Efficacy in Human Glioblastoma Multiforme: In Vitro and In Vivo Studies	<i>Sze-ching LO</i>
P27	A Case Study: Same Day Spontaneous Reduction of a Traumatic Infantile Depressed Skull Fracture	<i>Kinglam TANG</i>

PROGRAMME : NURSING SESSION

19 December 2020

Nursing Session

Chairpersons: Ms Shu-wah CHAU & Ms Kin-yee LO

1:52 p.m. – 2:02 p.m.	Reengineering service under COVID-19 crisis- “Ambulatory L-Dopa Challenge Test (LCT)”	Mei-yan CHANG
2:02 a.m. – 2:12 p.m.	Nurses’ perception on electronic system for vital signs collection and documentation in KWH High Dependency Unit – Introduction of Clinical Information System	Kin-wa CHAN
2:12 p.m. – 2:22 p.m.	The Clinical E-Platform	Riley Wai-hei WONG
2:22 p.m. – 2:32 p.m.	Nasal douching in relieving nasal symptoms for patient who underwent endonasal transsphenoidal surgery in Department of Neurosurgery	Ming-wai LAM
2:32 p.m. – 2:42 p.m.	Staff compliance with a workflow for patients transferring from other hospitals to interventional suites undergoing intra-arterial thrombectomy	Ngai-ting FUNG
2:42 p.m. – 2:52 p.m.	VR Orientation for awake craniotomy	Cheuk-ming WONG
2:52 p.m. – 3:02 p.m.	The Use of a Point-of-care Platelet Function Test in Dual Antiplatelet Therapy Monitoring for Neurovascular interventions: a single-centre experience	Kin-man KWOK
3:02 p.m. – 3:12 p.m.	Carer Burden in Caring Patients with Spasticity on Use of Botulinum Toxin with Rehabilitation	Shuk-man LO
3:12 p.m. – 3:22 p.m.	Q&A & Discussion	

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have been treated
to date with **Optune®**¹

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survival rate at
5 years with **Optune®**
+ TMZ versus
TMZ alone²

13% **5%**
OPTUNE®
+ TMZ² TMZ
alone²

Abbreviations: GBM=glioblastoma multiforme; TMZ=temozolomide

References: 1. Data on file. Novocure. Last updated January 2019. 2. Stupp, R. *et al.* JAMA 318, 2306–2316 (2017).

Indications for Use Optune Treatment Kit is intended for the treatment of patients with newly diagnosed GBM and for the treatment of patients with recurrent GBM. **Newly diagnosed GBM** NovoTTF-200A (Optune™) Treatment Kit is intended for the treatment of patients with newly diagnosed GBM, after surgery and radiotherapy with adjuvant Temozolomide, concomitant to maintenance Temozolomide. The treatment is intended for adult patients, 18 years of age or older, and should be started more than 4 weeks after surgery and radiation therapy with adjuvant Temozolomide. Treatment may be given together with maintenance Temozolomide (according to the prescribing information in the Temozolomide package insert) and after maintenance Temozolomide is stopped. **Recurrent GBM** NovoTTF-200A (Optune™) Treatment Kit is intended for the treatment of patients with recurrent GBM who have progressed after surgery, radiotherapy and Temozolomide treatment for their primary disease. The treatment is intended for adult patients, 18 years of age or older, and should be started more than 4 weeks after the latest surgery, radiation therapy or chemotherapy. **Contraindications** Do not use Optune Treatment Kit if you are pregnant, think you might be pregnant, or are trying to get pregnant. If you are a woman who is able to get pregnant, you must use birth control when using the device. Optune Treatment Kit was not tested in pregnant women. Do not use Optune Treatment Kit if you have significant additional neurological disease (primary seizure disorder, dementia, Progressive degenerative neurological disorder, Meningitis or encephalitis, Hydrocephalus associated with increased intracranial pressure) Do not use Optune Treatment Kit if you are known to be sensitive to conductive hydrogels like the gel used on electrocardiogram (ECG) stickers or transcutaneous electrical nerve stimulation (TENS) electrodes. In this case, skin contact with the gel used with Optune Treatment Kit may commonly cause increased redness and itching, and rarely may even lead to severe allergic reactions such as shock and respiratory failure. Do not use Optune if you have an active implanted medical device, a skull defect (such as, missing bone with no replacement) or bullet fragments. Examples of active electronic devices include deep brain stimulators, spinal cord stimulators, vagus nerve stimulators, pacemakers and defibrillators. Use of Optune together with implanted electronic devices has not been tested and may lead to malfunctioning of the implanted device. Use of Optune together with skull defects or bullet fragments has not been tested and may possibly lead to tissue damage or render Optune ineffective. Ref: EU IFU Document number QSD-EUUM-001-EN (Rev 04)

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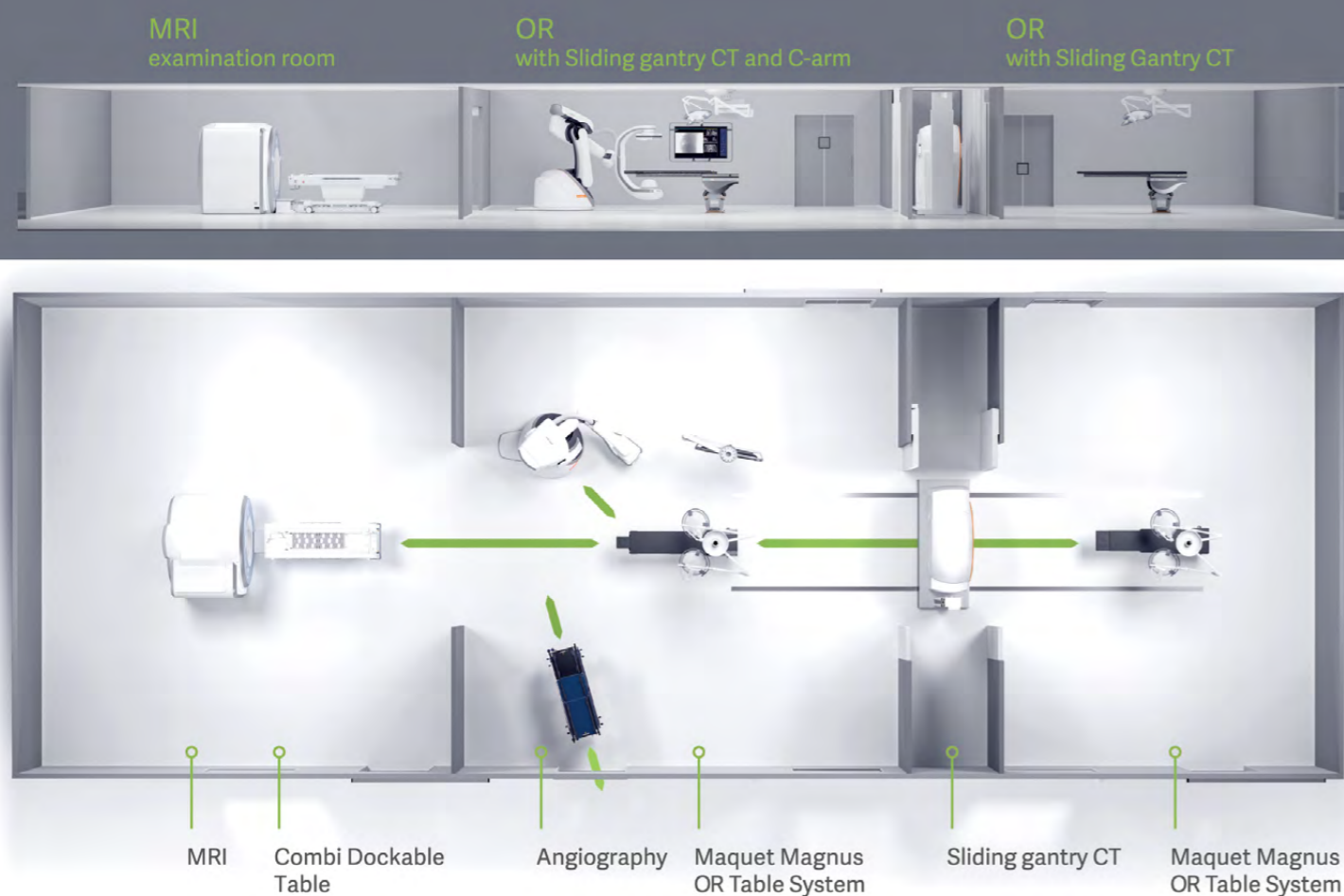


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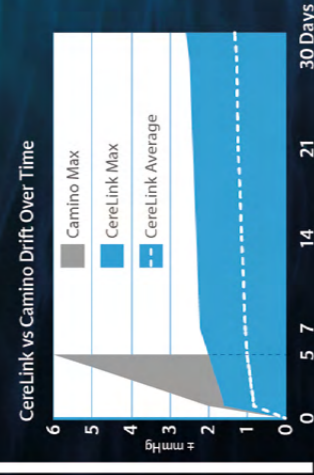
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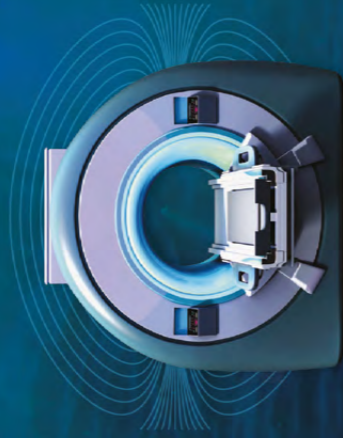
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References

1. Slezak P, et al. J Invest Surg 2020; ePub ahead of print;
2. Nasso G, et al. Ann Thorac Surg 2009;88:1520-6; 11. Bracey A, et al. Ann Thorac Surg 2017;104:353-60;
3. Tackett SM, et al. J Med Econ 2014;17:670-6.

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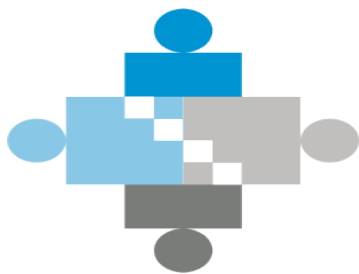
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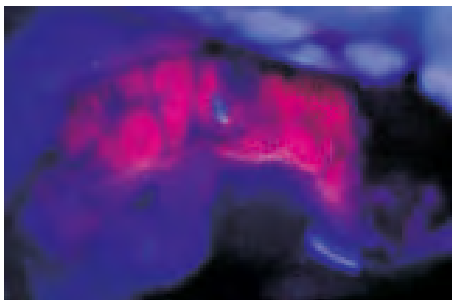
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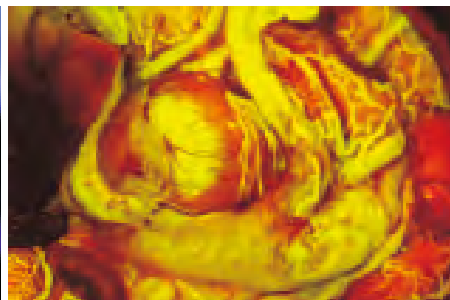
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