



**CELL AND GENE THERAPIES FOR MALAYSIA:  
CHALLENGES & FUTURE PROSPECT!**

**12<sup>th</sup> ANNUAL MACGT SYMPOSIUM**

**02 NOV 2024**

**Venue: Nexus Connection, Bangsar South**



# Programme

**CELL AND GENE THERAPIES FOR MALAYSIA:  
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Start	End	Program
8.30	9.00	Registration
9.00	9.15	Opening ceremony
9.15	9.30	Opening Address Dr Lim Teck Onn, President MACGT
9.30	10.00	Current status of cell therapy in Taiwan Dr Wannhsin Chen, President of Taiwan Association for Cellular Therapy, Vice General Manager / CTO Hexun Biosciences Co. Ltd
10.00	10.30	Refreshment (tea/coffee break) and Booth Visits
10.30	11.00	Cytopeutics Cyto-MSC as novel upfront use in acute GVHD: Results from a multicentre randomised controlled Phase I/II Clinical Trial Prof Dr. Chin Sze Piaw, Cytopeutics Sdn Bhd
11.00	11.30	Precision Diagnostic and Personalized Medicine Dr Jan Mou Lee, FullHope Biomedical Co., Ltd, New Taipei City, Taiwan (R.O.C.), Invited by Intran Technologies Sdn Bhd
11.30	12.00	PBSC for Musculoskeletal Regeneration Dr Saw Khay Yong, KLSCMC Stem Cells Sdn Bhd
12.00	12.30	Gold sponsor talk - Bio-Techne: Our commitment to cell and Gene Therapy Dr Suruchi Arora, Product Manager, SEA & ANZ, Bio-Techne
12.30	14.00	Lunch, Networking & Booth Visits
14.00	14.30	Gold sponsor talk by Mr Xiangliang Lin, Founder, CEO and President of Esco Aster, Deputy CEO of Esco Lifesciences Group
14.30	15.00	Raising Private Capital for Deep Tech: What Are Your Options? Mr Nicholas Chong, pitchIN
15.00	15.30	Stem Cell Therapy in Knee Osteoarthritis and Cartilage Injury - The UKM Clinical Experience. Assoc. Prof. Dato' Dr. Badrul Akmal Hisham Md Yusof, Cell & Gene Therapies Consultant, Invited by Malaysian Genomics Resource Centre Berhad (MGRC)
15.30	16.00	Advancing Cell & Gene Therapies: Regulatory Challenges and Future Directions Mr. Jay Padasian
16.00	16.15	Refreshment (tea / coffee break) and Booth Visits
16.15	16.45	Clinical Experiences of Chimeric Antigen Receptor T cell Therapy for Hematologic Malignancies Dr. Cheng-Yi Kuo, UWELL Biopharma Inc., New Taipei, Taiwan
16.45	17.00	Closing remarks Mr James Then, Vice President of MACGT
17.00	17.30	AGM MACGT Members



# MESSAGE FROM THE PRESIDENT

## DR LIM TECK ONN

Welcome Message from Dr. Lim Teck Onn, President of MACGT

Dear Esteemed Guests,

It is with great pleasure that I extend a warm welcome to all of you at the 12th Annual MACGT Symposium 2024, titled "Cell and Gene Therapies for Malaysia: Challenges & Future Prospects." We are pleased to convene here today at the Nexus Connection, Bangsar South, to discuss the exciting advancements, challenges, and future pathways in the field of cell and gene therapies.

Since our inception in 2012 as the Malaysian Association for Cell Therapy (MACT), our mission has been to foster the growth of the cell therapy industry and research in Malaysia. As innovations have flourished in both cell and gene therapies, we recognized the need to broaden our focus. Consequently, we officially rebranded to the Malaysian Association for Cell and Gene Therapy (MACGT) in December 2023, a change formally acknowledged by the Registrar of Societies (ROS). This new name symbolizes our commitment to confronting the challenges and seizing the opportunities that cell and gene therapies bring to our nation.

This year, we are privileged to host a roster of distinguished speakers and experts who will share their insights and knowledge. We are particularly excited to welcome Dr. Wannhsin Chen, President of the Taiwan Association for Cellular Therapy, who will provide us with an overview of the current landscape of cell therapy in Taiwan. Additional presentations will be made by esteemed experts, including Prof. Dr. Chin Sze Piaw, Dr. Jan Mou Lee, and Dr. Saw Khay Yong. We are also grateful to our Gold Sponsors, Bio-Techne: on their commitment to cell and gene therapy by Dr Suruchi Arora, Product Manager, SEA & ANZ, Bio-Techne and Mr. Xiangliang Lin from Esco Aster and Esco Lifesciences Group, for their contributions.

Our agenda promises to be thought-provoking, featuring Mr. Nicholas Chong discussing the potential for raising private capital in deep tech, and Assoc. Prof. Dato' Dr. Badrul Akmal Hisham Md Yusof sharing clinical experiences with stem cell therapy for knee osteoarthritis, Dr Kuo Cheng-yi who will update us on the first home-grown CAR-T trial in Taiwan. We are also looking forward to Mr. Jay Padasian's insights on the regulatory challenges and future directions related to advancing cell and gene therapies—an essential topic that is sure to ignite engaging discussions.

This symposium not only highlights the progress we have achieved collectively, but also serves as a reminder of the work that remains. Our diverse discussions today—spanning clinical developments, regulatory insights, personalized medicine, and emerging investment opportunities—will play a crucial role in shaping the future of cell and gene therapies in Malaysia.

I want to take a moment to express my sincere gratitude to all MACGT members for your unwavering support and active participation in the Malaysia Association for Cell and Gene Therapy. Your commitment to our mission and your collaborative spirit has been vital in advancing our goals.

Thank you for your continued support and dedication to this field. I hope you find today's symposium both insightful and inspiring as we work toward transforming healthcare through cell and gene therapies.

Warm regards,  
Dr. Lim Teck Onn  
President, MACGT

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# PRESIDENT

## Dr Lim Teck Onn

**MBChB, MRCP(UK), FRCP (Edin), M.Stat**



Dr. Lim Teck Onn is a distinguished leader in the fields of healthcare and biotechnology, with a career that spans both clinical practice and groundbreaking research. A graduate of the University of Glasgow with an MBChB, he also holds an MRCP (UK), an FRCP (Edinburgh), and a Master's in Medical Statistics from the University of Newcastle, Australia. Formerly a consultant nephrologist and director of the Clinical Research Centre at the Ministry of Health Malaysia, Dr. Lim now serves as a consultant. In this role, he provides consulting expertise to numerous companies in the biotech, pharmaceutical, and healthcare industries, specializing in health product development, health policy, and healthcare research.

Dr. Lim's expertise is internationally recognized. He has served as a WHO consultant for clinical research in China, advising the TCM Research Institute in Beijing (2002-2003), and as a consultant to the Aga Khan University (2005, 2006), the University Medical Centre HCM & MOH Vietnam (2007, 2008), the Ministry of Health Brunei (2007, 2008), and King Saud University College of Medicine in Saudi Arabia (2009). He is also an Adjunct Professor at the International Medical University, where he continues to influence the next generation of healthcare professionals. Additionally, Dr. Lim has worked as a consultant for stem cell and gene therapies in China, contributing his expertise to one of the fastest-growing fields in regenerative medicine.

Throughout his career, Dr. Lim has actively conducted research on a wide variety of diseases and therapies, publishing extensively in reputable journals. His notable research paper, "Assessing Doctors' Performance: Application of CUSUM Technique in Monitoring Doctor's Performance," was nominated for the prestigious Peter Reizenstein Prize. Dr. Lim has also authored "Malaysia's Covid-19 Epidemic: What's Next?" published by Code Blue, Health Is a Human Right portal, in March 2021. Recently, he was featured by Sokong Kini in May 2024 for his community health initiative, Healthy Malaysia. This NGO leverages advanced technology, including portable ultrasound devices and AI-driven diagnostics, to make healthcare more accessible and convenient, particularly for chronic diseases and cancer screenings.

Dr. Lim Teck Onn's commitment to advancing healthcare through research, technology, and community outreach has been instrumental to his leadership at MACGT. Under his guidance, MACGT continues to push the boundaries of cell and gene therapies in Malaysia, addressing challenges and embracing new opportunities to improve healthcare for all.

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# MESSAGE FROM THE VICE PRESIDENT

## MR JAMES THEN Khong Lek

As we gather for our 12th annual symposium, it's incredible to reflect on the journey of the Executive committee of Malaysia Association for Cell and Gene Therapy (MACGT) since our establishment in 2012. Over the years, the Malaysian Association for Cell and Gene Therapy (MACGT) has grown tremendously, driven by our unwavering commitment to advancing cell and gene therapies in Malaysia. This journey would not have been possible without the strong leadership and vision of our President, Dr. Lim Teck Onn. As a steadfast commander of our association, Dr. Lim has guided us in navigating challenges and seizing opportunities to bring innovative therapies closer to those who need them

This year's symposium, themed "Cell and Gene Therapies for Malaysia: Challenges & Future Prospects," marks another milestone in our journey. As we look to the future, MACGT is dedicated to addressing the unique challenges facing our field, particularly within the regulatory landscape. Navigating these regulatory challenges is crucial to ensuring that cell and gene therapies can be safely, effectively, and quickly brought to patients across Malaysia.

MACGT remains deeply committed to representing the voices of all stakeholders in cell and gene therapy, and we recognize the importance of collaboration in overcoming barriers. By working with regulatory bodies, fostering partnerships, and staying attuned to emerging trends, we are positioned to drive progress and accelerate therapeutic discoveries.

We are here not only to address the challenges in the field but also to embrace the immense opportunities that lie ahead

With the ongoing emergence of new technologies and trends shaping the future of therapy, MACGT aims to grow even larger and more influential. We are dedicated to ensuring that our community remains at the forefront of innovation, advocating for advancements that will ultimately improve patient care and outcomes in Malaysia.

As we move forward, we aim to expand our impact, advocating for a regulatory framework that supports innovation and paves the way for transformative healthcare solutions. Together, we can shape a future where cell and gene therapies play a vital role in improving lives across Malaysia.

Thank you for your participation and support as we continue this important work together. Let us use this symposium as a springboard for further collaboration and progress in the field of cell and gene therapy.

Sincerely,  
James Then  
Vice President, MACGT



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# **VICE PRESIDENT** **MR James Then Khong Lek**

**MSC**

Mr. James Then is the Managing Director of the CryoCord group of companies, which encompasses Cytopeutics, Cellavie, and StemTech International. He holds a Bachelor's degree in Economics and a Master's in Management Science & Operational Research from the University of Warwick in the UK.

Mr. Then began his career in the Economics and Planning Unit at Sarawak Shell Berhad and has since established himself as a prominent figure in the biotechnology sector. He is a co-founder of both CryoCord and Cytopeutics and currently serves on the boards of several companies, contributing his extensive knowledge and experience.

As the Vice President of the Malaysian Association for Cell and Gene Therapy (MACGT), Mr. Then has been actively involved in the Therapeutics Working Group (TWG) of the National Pharmaceutical Regulatory Agency, where he contributed to the drafting of guidelines for cell and gene therapy.

With 18 years of experience at CryoCord and 13 years with Cytopeutics, Mr. Then has navigated numerous challenges in the evolving field of stem cells. He is an advocate for the expanding applications of stem cell technology and is committed to making these advancements accessible to as many people as possible. His vision emphasizes continuous education, operational efficiency, and the integration of cutting-edge technology, all while upholding the highest standards and ethical practices in medical biotechnology.

In addition to his work at MACGT, Mr. Then is an active member of the International Society for Cellular Therapy (ISCT) and served as a committee member for their Annual Meeting in Singapore in 2016. He has participated in various conferences and seminars focused on cell and stem cell therapy, furthering his commitment to advancing this critical field.

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# Current Status of Cell Therapy in Taiwan

## Dr Wannhsin Chen

**Taiwan Association for Cell Therapy 台灣細胞醫療協會 (TACT), President**

**Vice General Manager & CTO, Hexun Biosciences Co., Taiwan**

### Educational Background:

Dr. Chen holds a Ph.D. in Life Sciences through a joint program involving Academia Sinica, the National Health Research Institute, and the National Defense Medical College in Taiwan.

### Professional Background:

Dr. Chen has over 20 years of experience in stem cell research and cell therapy product development. She currently serves as the Vice General Manager and CTO of Hexun Biosciences Co., where she leads innovative projects in tissue regeneration and stem cell technology. Previously, she held key positions at the Industrial Technology Research Institute (ITRI), contributing to advanced biomedical engineering research.

### Research Interests and Expertise:

Dr. Chen specializes in the development of cell therapy products, with a focus on stem cell culturing and differentiation, human embryonic stem cells, and tissue engineering. Her extensive work in stem cell research has garnered several prestigious awards, including national invention awards and research excellence accolades.

### Notable Achievements:

Dr. Chen has been recognized by the Ministry of Economic Affairs and ITRI for her contributions to biomedicine, with awards for research excellence, innovation, and industrial impact.

### Professional Affiliations:

She is a founding member and current President of the Taiwan Association for Cell Therapy (TACT) and serves on the TFDA Regenerative Medicine Consulting Committee. Dr. Chen is also an active member of the International Society for Stem Cell Research (ISSCR) and the International Society for Cell Therapy (ISCT).

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**12<sup>th</sup> ANNUAL MACGT SYMPOSIUM**

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# Current Status of Cell Therapy in Taiwan

## Dr Wannhsin Chen

**Taiwan Association for Cell Therapy 台灣細胞醫療協會 (TACT), President**  
**Vice General Manager & CTO, Hexun Biosciences Co., Taiwan**

### Abstract

The landscape of cell and gene therapy in Taiwan is evolving rapidly, supported by regulatory and an expanding ecosystem of clinical research and product development. This abstract outlines the current status of cell therapy in Taiwan, highlighting key regulatory aspects, ongoing clinical trials, industry collaboration opportunities, and the role of relevant organizations.

Taiwan's regulatory environment is governed primarily by two significant pieces of legislation: the Act on Regenerative Medicine Treatments and the Act on Regenerative Medicinal Products. These acts provide a comprehensive regulatory framework aimed at promoting innovation while ensuring patient safety. They facilitate the approval process for regenerative medicine products, including cell and gene therapies, enabling faster access to groundbreaking treatments. The regulatory bodies in Taiwan have made substantial progress in harmonizing standards with international practices.

Currently, Taiwan has six approved gene and cell therapy products, including the widely recognized CAR-T therapies. Additionally, there is an impressive portfolio of clinical trials underway, comprising 130 cell therapy trials across various phases (I, II, and III) and 46 gene therapy clinical trials. These trials represent a wide spectrum of applications, from oncology to genetic disorders, underscoring Taiwan's commitment to advancing regenerative medicine.

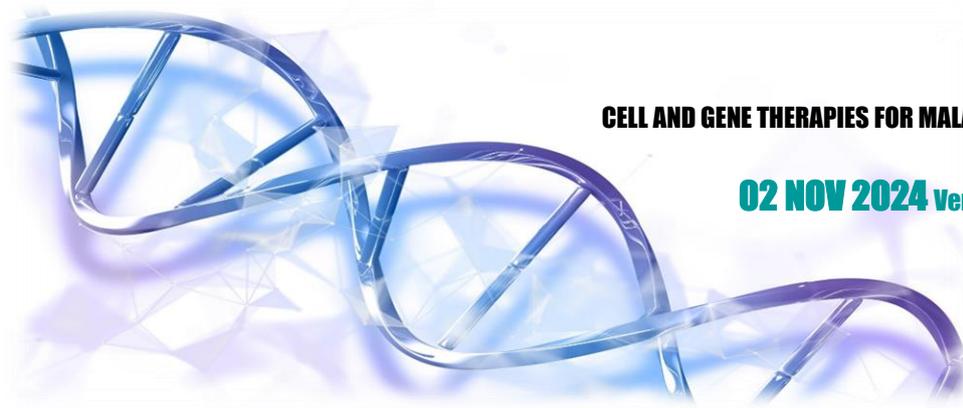
The burgeoning sector has also led to the emergence of numerous biotechnology firms dedicated to cell therapy research and product development. Many of these companies are actively seeking international collaborations to enhance their capabilities and broaden their market reach. This spirit of cooperation is vital, as it fosters the sharing of knowledge, resources, and technologies that can drive innovation and accelerate the development of novel therapies.

A significant player in this ecosystem is the Taiwan Association for Cellular Therapy (TACT). Established to promote cell therapy research, regulation, clinical applications, and industrialization, TACT serves as a vital connection among academic researchers, regulatory bodies, hospitals, and industry stakeholders. The association plays an instrumental role in advocating for the advancement of cell therapy and actively participates in international organizations, positioning Taiwan as a collaborative partner on the global stage.

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**12<sup>th</sup> ANNUAL MACGT SYMPOSIUM**

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# Current Status of Cell Therapy in Taiwan

## Dr Wannhsin Chen

**Taiwan Association for Cell Therapy 台灣細胞醫療協會 (TACT), President**  
**Vice General Manager & CTO, Hexun Biosciences Co., Taiwan**

Continue....

Among the emerging companies in Taiwan's cell therapy landscape is Hexun Biosciences Co., founded in 2019. This life science company is dedicated to the development of innovative cell therapy products and offers Contract Development and Manufacturing Organization (CDMO) services. Hexun's commitment to quality and innovation positions it as a pivotal player in Taiwan's regenerative medicine sector, driving forward the development of cutting-edge therapies.

In conclusion, the current status of cell therapy in Taiwan reflects a dynamic and rapidly evolving field supported by regulatory frameworks, a wealth of clinical trials, and an active industry seeking global collaboration. The synergistic efforts of organizations like TACT and companies like Hexun Biosciences are instrumental in propelling Taiwan to the forefront of cell and gene therapy innovation, fostering an environment conducive to research, development, and patient access to life-changing therapies.

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**12<sup>th</sup> ANNUAL MACGT SYMPOSIUM**

**02 NOV 2024** Venue: Nexus Connection, Bangsar South



# Notes

# **Cytopapeutics Cyto-MSC as novel upfront use in acute GVHD: Results from a multicentre randomised controlled Phase I/II Clinical Trial**



**Prof Dr. Chin Sze Piaw**  
**Cytopapeutics Sdn Bhd**

Dr Chin Sze Piaw is a medical specialist who obtained his MBBS in 1995 and his MRCP in 1998. In addition, he is also Adjunct Professor and Honorary Fellow of the Centre for Stem Cell Research at UTAR, and a Lecturer at UM for the Advanced Masters in Regenerative Medicine program. Dr Chin has served on expert committees for clinical practice guidelines, and several research and registry steering committees for cardiovascular disease and stem cell research. Dr Chin has over 80 publications in international peer-reviewed journals and presented at international medical conferences for the demonstration of clinical anti-inflammatory and immunomodulatory actions of mesenchymal stem cells (MSC) in cardiomyopathy, stroke and diabetes complications and osteoarthritis. Dr Chin was jointly awarded patents from the USA for his pioneering use of MSC treatment for acute stroke, vernal keratoconjunctivitis and diabetes and has been a joint recipient of numerous grants including the MOSTI Technofund. In 2022 Dr Chin was nominated by MOSTI and endorsed by the MOE for the UNSESCO Life Sciences Researcher Award. And this year Dr Chin became the first Asian recipient of the prestigious major global award by the International Society for Cell and Gene Therapy (ISCT).

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**12<sup>th</sup> ANNUAL MACGT SYMPOSIUM**

**02 NOV 2024** Venue: Nexus Connection, Bangsar South

# Cytopeutics Cyto-MSC as novel upfront use in acute GVHD: Results from a multicentre randomised controlled Phase I/II Clinical Trial



**Prof Dr. Chin Sze Piau**  
Cytopeutics Sdn Bhd

Mesenchymal stem cells (MSCs) have attracted attention for their immunomodulation property that is achieved through the release of various mediators in response to injury with subsequent tissue regeneration. We have previously demonstrated the therapeutic potential of Cytopeutics® MSCs (Cyto-MSC) in various ischemic disorders such as ischemic stroke, diabetes critical limb ischemia and end-stage cardiomyopathy. Notably, Cytopeutics® MSCs accelerates recovery among acute ischemic stroke patients as early as 6-week post-treatment with significant difference between groups in functional improvement at 3 months and MRI at 12 months showed reduction in median infarct volume. We have also successfully demonstrated regeneration of cartilage in osteoarthritis and a significantly faster improvement compared to bone marrow celution with hylafast. In this lecture, we will discuss the final results from our latest multi-centre randomized clinical trial. The upfront use of Cytopeutics® MSCs in combination with standard treatment led to faster and sustained complete response with better overall, relapse-free and disease-free survival in aGVHD patients.

**Background:** The prognosis for acute graft-versus-host-disease (aGVHD) remains poor despite advances in its management, emphasizing the continuous unmet need for an effective treatment. **Methods:** In this phase I/II trial, grade II-IV aGVHD patients were randomized to receive up to three infusions of Cyto-MSC ( $5 \times 10^6$  cells/kg bw) or placebo together with standard first-line corticosteroid therapy (ClinicalTrials.gov: NCT03847844). Twenty-two patients were enrolled; 8 received a placebo and 14 received Cyto-MSC. Overall response (OR), overall survival (OS), and subclinical immune subsets and biomarkers were assessed. **Results:** No adverse events associated with the treatment were recorded. There were no significant differences between Cyto-MSC and placebo in the OR at Day 28 (78.6% vs 62.5%) and OS at 12 months (56.7% vs 37.5%). In grade III-IV aGVHD patients who achieved OR by Day 28, Cyto-MSC group demonstrated 100% OS at 12 months, compared to 50% for placebo ( $p=0.09$ ). Recipients of Cyto-MSC had twice the odds of survival at 12 months compared to placebo (odds ratio 2.00; 95% CI 0.75-5.33;  $p=0.039$ ). Furthermore, all grade III-IV aGVHD patients with  $CD8^+T_{EMRA} > 70\%$  who received Cyto-MSC were still alive at 12 months, whereas none of the patients in the placebo group with  $CD8^+T_{EMRA} < 70\%$  survived ( $p=0.01$ ). OS at 12 months was positively correlated with OR at Day 28 ( $r=0.67$ ,  $p < 0.001$ ),  $CD4^+T_{EMRA}$  ( $r=0.54$ ,  $p=0.009$ ), and  $CD8^+T_{EMRA}$  ( $r=0.45$ ,  $p=0.036$ ). **Conclusion:** Individuals with aGVHD, particularly those in grade III-IV achieving early response and whose baseline  $CD4^+T_{EMRA}$  exceeded 35% or  $CD8^+T_{EMRA}$  surpassed 70%, may have an overall survival benefit from receiving upfront treatment of Cyto-MSC in combination with standard corticosteroid therapy.

CELL AND GENE THERAPIES FOR MALAYSIA: CHALLENGES & FUTURE PROSPECT!

12<sup>th</sup> ANNUAL MACGT SYMPOSIUM

02 NOV 2024 Venue: Nexus Connection, Bangsar South

# Precision Diagnostic and Personalized Medicine



**Dr Jan Mou Lee**

**FullHope Biomedical  
Co., Ltd, New Taipei City, Taiwan (R.O.C.),  
Invited by Intran Technologies Sdn Bhd**

Dr. Jan-Mou Lee, founder of FullHope Biomedical Co., Ltd. in 2012, holds a Ph.D. in molecular immunology. He is a leading expert in cancer immunotherapy, nanomedicine, and cancer stem cell research. Dr. Lee has spearheaded numerous impactful projects, including the development of mouse PDAC primary tumor cell lines and xenograft models for pancreatic ductal adenocarcinoma (PDAC) immunotherapy. Notably, he has led pivotal studies, such as the SBIR projects on characterizing human natural killer dendritic cells (2013) and preclinical development of regulatory CD8+ NKT cells (2014-2015).

Dr. Lee's research contributions include multiple significant publications, such as "Enhanced IL-10 production by CD4+ T cells primed in IL-15R $\alpha$ -deficient mice" (Eur. J. Immunol.) and "Selective reduction of post-selection CD8 thymocyte proliferation in IL-15R $\alpha$ -/- mice" (PLoS ONE). His latest work on novel biomarkers for Nivolumab-treated hepatocellular carcinoma patients is currently under review at Cancer Immunology Research.

## **Precision Diagnostic and Personalized Medicine**

Since dysregulation of the immune system is frequently observed in patients with solid tumors and autoimmune disorders, evaluating changes in the immune cell profile can support physicians in prescribing more precisely. Regarding precision diagnosis, FullHope Biomedical Co., Ltd. (FHB) provides Immunoprofiling (IP) and Circulating Tumor Cells Testing (CTC), which track changes in the immune system and the phenotypes of circulating tumor cells (e.g., mutant EGFR, VEGFR1-3, and PD-L1) via flow cytometry and epitope-specific monoclonal antibodies. Based on the information from IP and CTC, physicians can help patients assess the risk of suffering from immune-related diseases. For patients with solid tumors or immune-related tumors, physicians can estimate the effectiveness of immunotherapies (such as immune checkpoint inhibitors (ICIs) and adoptive cell therapy [ACT]) and customize medication tailored to their needs. In addition to precision diagnosis, FHB also develops several pipelines in regenerative medicine, including one-stop cultivation techniques for tumor-specific T cells, antibody-conjugated immune effector cells, adipose-derived mesenchymal stem cells, and immune-effector-cell-derived exosomes, which can customize the production of regenerative medicine products to address different clinical needs.

**CELL AND GENE THERAPIES FOR MALAYSIA: CHALLENGES & FUTURE PROSPECT!**

**12<sup>th</sup> ANNUAL MACGT SYMPOSIUM**

**02 NOV 2024** Venue: Nexus Connection, Bangsar South



# **PBSC for Musculoskeletal Regeneration**

## **Dr Saw Khay Yong**



**Chief Executive Officer,  
KLSMC Stem Cells & Consultant Orthopaedic  
Surgeon, Kuala Lumpur Sports Medicine  
Centre**

Dr Saw Khay Yong is the founder and Consultant Orthopaedic Surgeon at the Kuala Lumpur Sports Medicine Centre. He specialises in knee joint arthroscopic surgery with application of stem cells for articular cartilage regeneration. In Year 2005, he started his research work in Cartilage Regeneration with the use of stem cells to repair and regenerate damaged cartilage. He has completed a Phase 2b multicentre US-FDA trial and is currently planning for a Phase 3 US-FDA clinical trial. He has presented his work at more than 100 scientific meetings, published 15 peer reviewed journals on stem cells related work and received numerous awards exclusively on knee cartilage regeneration. Dr Saw also has several patents granted for this world's first method of cartilage regeneration in the knee and on his novel medical devices. He is currently the CEO for both the subsidiary companies: KLSMC Stem Cells Sdn Bhd, Malaysia and KLSMC Stem Cells Inc, USA.

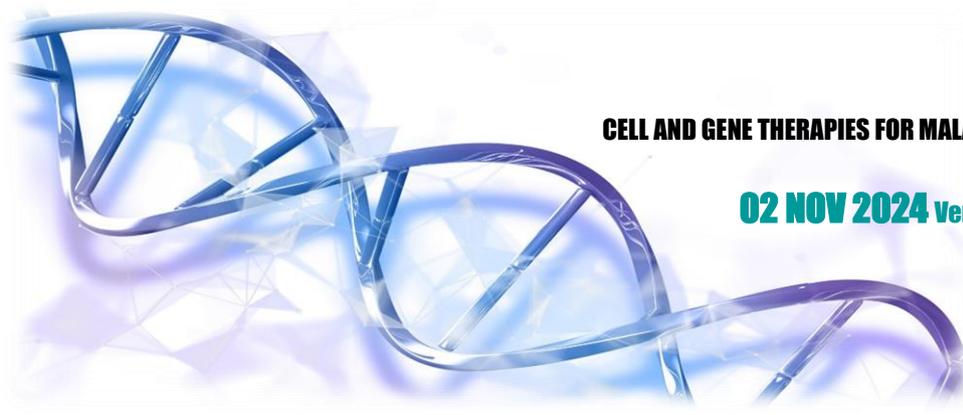
### **Peripheral Blood Stem Cells (PBSC) for Musculoskeletal Regeneration**

Peripheral blood stem cells (PBSC) therapy has been shown to be able to address bone and cartilage lesions in the knee and ankle joints. In addition to bone and cartilage regeneration, PBSC therapy is also applicable to the other aspects of the musculoskeletal system. Arthroscopic subchondral drilling followed by intraarticular injections of PBSC plus hyaluronic acid (HA) has shown the ability to regenerate hyaline cartilage. High tibial osteotomy in combination with chondrogenesis with stem cells have shown good long term data with histological scores of the regenerated cartilage approaching 95% of normal cartilage scores on ICRS II histological assessment. A recently published US-FDA phase 2b randomized controlled trial treating massive knee chondral lesions have shown the safety and efficacy of the K.A.R.T. procedure (KLSMC Articular Regeneration Technology) to address this unmet medical needs. Clinical cases with examples to applications to the knee and ankle joints showed that the biological approach to reverse osteoarthritis is now within our grasp.

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**12<sup>th</sup> ANNUAL MACGT SYMPOSIUM**

**02 NOV 2024 Venue: Nexus Connection, Bangsar South**



**GOLD SPONSOR TALK**  
**Bio-Techne: Our commitment  
to cell and Gene Therapy**  
**Dr Suruchi Arora**



**Product Manager, SEA & ANZ, Bio-Techne**

Dr. Suruchi Arora is a Product Manager at Bio-Techne and has been with the company for eight years. Based in Singapore, she manages technical support, trainings, and pre/post-sales activities across the Asia-Pacific region for all Biotechne brands like R&D Systems, Novus Biologicals, and Protein Simple. With a PhD in Immunology and Molecular Virology from the National University of Singapore and two years of postdoctoral experience, she has a vast expertise in her field. Dr. Arora has published in several peer reviewed journals and takes great interest in learning and sharing the latest cutting edge technologies.

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**12<sup>th</sup> ANNUAL MACGT SYMPOSIUM**

**02 NOV 2024** Venue: Nexus Connection, Bangsar South





# **GOLD SPONSOR TALK** **Xiangliang Lin**

**Founder, CEO and  
President of Esco Aster, Deputy CEO of Esco  
Lifesciences Group**

XL Lin is the founder, CEO and President of Esco Aster, as well as the Deputy CEO of Esco Lifesciences Group. With a Bachelor of Sciences from the University of Sydney, XL Lin joined Esco Lifesciences Group, transforming its Healthcare business unit from a visionary concept into a global powerhouse.

XL was the driving force behind the creation of Esco's "Discovery to Delivery" platform, ingeniously developing commercial, chemical, and biomanufacturing systems which are now used in nine (9) commercial human and animal health vaccines. His strategic vision and leadership helped expand Esco's reach from its Singapore headquarters to key markets in Taiwan, the USA, the UK, and across ASEAN and East Asia.

As a visionary leader in the field of cell and gene therapy, XL has played a pivotal role in advancing innovative bioprocessing solutions for the rapidly evolving regenerative medicine industry.

In 2018, XL's impact continued to resonate as Esco Aster emerged from Esco Lifesciences Group as an independent entity. Under his guidance, Esco Aster Pte Ltd quickly established itself as a frontrunner in contract, research, development and manufacturing, dedicated to pioneering new modalities that promise significant advancements in healthcare. The company has become a trailblazer in cell therapy manufacturing, leveraging cutting-edge technologies like the proprietary Tide Motion bioreactors to establish robust and scalable platforms for clinical therapies.

XL's expertise encompasses:

1. Cell Therapy Manufacturing: Pioneering optimised bioprocesses for maximum yield and quality in both autologous and allogeneic stem cell production.
2. Gene Therapy Development: Spearheading advancements in viral vector production and plasmid DNA manufacturing services.
3. Genetically-Modified Cell Therapies: Addressing bottlenecks in manufacturing CAR-T and other engineered immune cell therapies.
4. Innovative Bioprocessing Platforms: Developing novel technologies like the Adherent Tide Motion® system and Astericle™ for extracellular vesicle production.
5. cGMP Process Development: Guiding the translation of academic and industrial R&D into benchscale and commercial manufacturing processes.

As a gold sponsor speaker at MACGT Mini-conference 2024, XL Lin brings invaluable insights into the current state and future directions of cell and gene therapy manufacturing, with a particular focus on overcoming challenges in scalability, quality control, and regulatory compliance for bringing these transformative therapies to patients worldwide.

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**12<sup>th</sup> ANNUAL MACGT SYMPOSIUM**

**02 NOV 2024** Venue: Nexus Connection, Bangsar South



# Raising Private Capital for Deep Tech: What Are Your Options?



## Mr Nicholas Chong

**Head of Token Crowdfunding (TCF), pitchIN**

Nicholas is a strong advocate of capital markets and private markets innovation in Malaysia. He currently leads the Token Crowdfunding Business at pitchIN - a leading private market fundraising and investment platform in Malaysia that helps company to raise capital through Equity Crowdfunding (ECF) and Token Crowdfunding (TCF). To date, pitchIN has helped more 170+ companies raise RM300M+ for their business XXX.

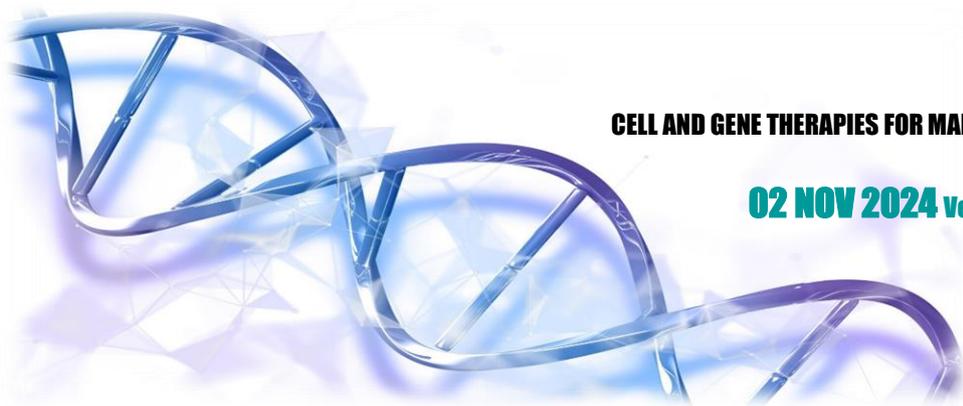
Prior to joining pitchIN, Nicholas spent five years with Securities Commission Malaysia (SC). During which, he championed development policies for digital assets, including on token issuances, listing, custody, and DeFi. Nicholas was also instrumental in the development of the SC's five-year blueprint for the Capital Market, and has led various research verticals to shape the SC's policies on SupTech, RegTech, sustainable finance, and behavioral finance.

### **Raising Capital for Deep Tech: What Are Your Options?**

Bringing scientific breakthroughs and cutting-edge research to market is often a long and capital-intensive journey—sometimes spanning years or even decades. This session explores the unique challenges of fundraising for deep tech ventures, from research-driven inventions to disruptive technologies. Attendees will gain insights into the latest trends in scientific fundraising, learn how to navigate the complexities of the private market, and discover diverse funding avenues,

**CELL AND GENE THERAPIES FOR MALAYSIA: CHALLENGES & FUTURE PROSPECT!**  
**12<sup>th</sup> ANNUAL MACGT SYMPOSIUM**

**02 NOV 2024** Venue: Nexus Connection, Bangsar South



# Stem Cell Therapy in Knee Osteoarthritis and Cartilage Injury - The UKM Clinical Experience.

## Assoc. Prof. Dato' Dr. Badrul Akmal Hisham Md Yusoff



**Cell & Gene Therapies Consultant,  
Invited by Malaysian Genomics Resource  
Centre Berhad (MGRC)**

Assoc. Prof. Dato' Dr. Badrul Akmal Hisham Md Yusoff, is the Head of Arthroscopy & Sports Trauma Unit, Department of Orthopedics & Traumatology, Faculty of Medicine, Universiti Kebangsaan Malaysia (UKM). He supervises undergraduate MD students as well as postgraduate trainees in Doctor of Orthopedic Surgery program. He is an examiner for the Conjoint Board of Orthopedic Specialty Committee of Malaysia and regularly conducts cadaveric skills courses in arthroscopic surgery for the knee and shoulder in UKM's Advanced Surgical Skills Center. He is currently the Honorary Secretary and a Council member of the Malaysian Arthroscopy Society for period 2019-2021 in which he also chairs the Academic and Research committee of MAS.

On the clinical service outfit, Orthosports-ukm, is a specialized multidisciplinary team focusing on providing clinical services as the Center of Excellence for Joint Preservation, Arthroscopy and Sports Trauma in Hospital Canselor Tuanku Muhriz, UKM Medical Center, which receives referral from all over Malaysia. He established the UKM Medical Center Orthopedic Stem Cell Therapy hub providing experimental stem cell therapy for articular cartilage and the use of orthobiologics for sports injuries. He has led several clinical trials mainly using allogenic Wharton jelly-derived mesenchymal stem cells clinical translational research and also development of novel anti-biofilm coated orthopedic implants for open and high risk fractures.

### "Stem Cell Therapy in Knee Osteoarthritis and Cartilage Injury - The UKM Clinical Experience."

Osteoarthritis (OA) is a prevalent degenerative joint disease characterized by the progressive degradation of articular cartilage, leading to chronic pain, stiffness, and reduced joint function. Current conventional therapies predominantly focus on symptom management—such as pain relief—rather than repairing the underlying cartilage damage. This limitation highlights the urgent need for innovative treatment modalities. Among emerging therapeutic strategies, mesenchymal stem cell (MSC) therapy shows promise for promoting cartilage regeneration and alleviating the symptoms of knee OA.

Articular cartilage, primarily composed of chondrocytes and an extracellular matrix (ECM) rich in type II collagen and proteoglycans, plays a vital role in joint function. However, it lacks direct blood supply and innervation, resulting in limited self-healing capacity. When cartilage is injured from acute trauma, chronic wear, or metabolic disturbance, the natural repair mechanisms are often insufficient, leading to the progressive degeneration characteristic of OA. This degeneration is exacerbated by pro-inflammatory cytokines, such as interleukin-1 beta (IL-1 $\beta$ ) and tumor necrosis factor-alpha (TNF- $\alpha$ ), which promote inflammatory responses and drive catabolic processes responsible for further cartilage loss.

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# Stem Cell Therapy in Knee Osteoarthritis and Cartilage Injury - The UKM Clinical Experience.

## Assoc. Prof. Dato' Dr. Badrul Akmal Hisham Md Yusoff



**Cell & Gene Therapies Consultant,  
Invited by Malaysian Genomics Resource  
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"Stem Cell Therapy in Knee Osteoarthritis and Cartilage Injury - The UKM Clinical Experience."

Conventional treatments for knee OA encompass both pharmacological and non-pharmacological approaches. Non-steroidal anti-inflammatory drugs (NSAIDs), corticosteroid injections, and hyaluronic acid are commonly used to provide symptomatic relief. However, these strategies primarily manage pain rather than target the disease's progression or repair damaged cartilage. Surgical options, such as arthroscopy or joint replacement, are typically reserved for advanced OA and carry significant risks and recovery times. The lack of effective disease-modifying treatments underlines the need for alternative therapeutic strategies capable of promoting cartilage repair.

Mesenchymal stem cells, isolated from sources such as bone marrow, adipose tissue, and umbilical cord, have garnered significant attention for their therapeutic potential in OA. MSCs have the unique ability to differentiate into chondrocytes, providing a potential source of new cartilage cells. Additionally, they possess substantial immunomodulatory properties, allowing them to reduce inflammation and alter the local joint environment favorably for healing.

The safety and efficacy of MSC therapy in treating sports injuries involving the muscle, ligament, tendon, bone, cartilage, and nervous tissues have been demonstrated in many preclinical and clinical studies. Evidence indicates that both autologous and allogenic intra-articular injection of MSCs can lead to improvements in pain, function, and overall joint health. For example, studies involving autologous MSCs have demonstrated significant reductions in pain levels and visible improvements in cartilage quality based on imaging studies. Moreover, MSC therapy has been shown to stimulate local regenerative processes, enhancing the biological environment for cartilage healing by releasing various growth factors and anti-inflammatory cytokines.

In 2016, our team of orthopaedic surgeons and stem cell scientists, succeeded in treating a group of patients using unmatched donor umbilical cord-derived mesenchymal stem cells for knee articular cartilage defects in a pilot clinical trial for Malaysia and UKM. By addressing the underlying degeneration and promoting regeneration rather than merely alleviating symptoms, MSC therapy holds substantial promise as a viable treatment option for Osteoarthritis. In this presentation, we would like to highlight our continued research and clinical trials dedicated to fully optimize the potential of MSC therapy in improving patient outcomes in Osteoarthritis.

Keywords: Knee Osteoarthritis, Cartilage Injury, MSCs (Mesenchymal Stem cells), Cartilage Regeneration, Clinical Trial, UKM.

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# Advancing Cell & Gene Therapies: Regulatory Challenges and Future Directions

## Mr. Jay Padasian



**R.Ph./ Principal/ Director**

Jay Padasian is a U.K.-qualified, Registered Pharmacist with over 28 years of experience heading MNC Subsidiaries as well as government agency industry development units. He is an entrepreneur and consultant in multiple technical and commercial areas for Corporations as well as Federal & State Government Ministries and Agencies.

Mr. Padasian was a Steering Committee Member of Malaysia's Economic Transformation Program (ETP) National Key Economic Area (NKEA) Healthcare and the Bioeconomy Transformation Programme. He was a Malaysian government-cleared advisor for the Trans-Pacific Partnership Agreement

He was a Member of the Technical Working Group on Cell and Gene Therapy Products (TWG-CGTPs) responsible for the Guidance Document And Guidelines For Registration Of Cell And Gene Therapy Products (CGTPs) In Malaysia

Mr. Padasian has a distinguished career marked by his involvement in pivotal educational and policy-making roles within Malaysia as a former member of the Board of Studies for Universiti Sains Malaysia and Universiti Malaya. He is currently an Industry Advisory Board Member for the International Medical University

His expertise in the commercial viability of scientific research is evident from his ongoing involvement in MOSTI's Technical & Commercial Evaluation Expert Panel for over 10 years. During the Covid pandemic, he was appointed National Experts Group Technology Development (EGTD) for Vaccines.

Mr. Padasian was the Advisor/ Subject Matter Expert for the recently launched "Sabah Biotechnology Blueprint 2024-2034".

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**12<sup>th</sup> ANNUAL MACGT SYMPOSIUM**

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# Clinical Experiences of Chimeric Antigen Receptor T cell Therapy for Hematologic Malignancies



**Cheng-Yi Kuo, Ph.D.**

**Vice General Manager – UWELL Biopharma Inc., New Taipei, Taiwan**

Speaker Profile: Cheng-Yi Kuo, Ph.D.

Education:

Ph.D. in Pharmaceutical Biology, Monash University, Melbourne, Australia

M.Phil. in Pharmacy and Pharmacology, University of Bath, UK

M.S. in Agricultural Chemistry, National Taiwan University, Taipei, Taiwan

B.S. in Medical Technology, Chung-Shan Medical University, Taichung, Taiwan

Professional Experience:

Dr. Cheng-Yi Kuo currently serves as the Vice General Manager of UWELL Biopharma Inc., New Taipei, Taiwan, a position he has held since June 2018. He also contributes to academia as an Adjunct Assistant Professor at the Graduate Institute of Biology and Anatomy at the National Defence Medical Centre and the Department of Biomedical Engineering at Chung Yuan Christian University.

His extensive industry background includes roles such as Special Assistant to the Chairman at Vectorite Biomedical Inc., Vice President at CoAsia Biotech Co., and Medical Affairs Director at JCR Biotech Co. Ltd. Moreover, Dr. Kuo has led teams as General Manager at Foreway Biotechnology Inc. and Project Manager at Seeing Bioscience Co. Ltd., demonstrating a diverse skill set in management, research, and development across the biotech landscape.

Research Contributions:

Dr. Kuo is recognized for his significant contributions to the field of pharmaceutical sciences, with multiple publications to his name. His latest paper, co-authored with peers, addresses the presentation of chylothorax following chimeric antigen receptor T cell therapy for relapsed and refractory diffuse large B-cell lymphoma, published in *Medicine* in October 2023.

Research Interests:

His research interests encompass pathobiotechnology, cell and gene therapy (both viral and non-viral), vaccinology, mucosal immunology, and the fields of oncology and hematology, as well as biomedical engineering.

Patents:

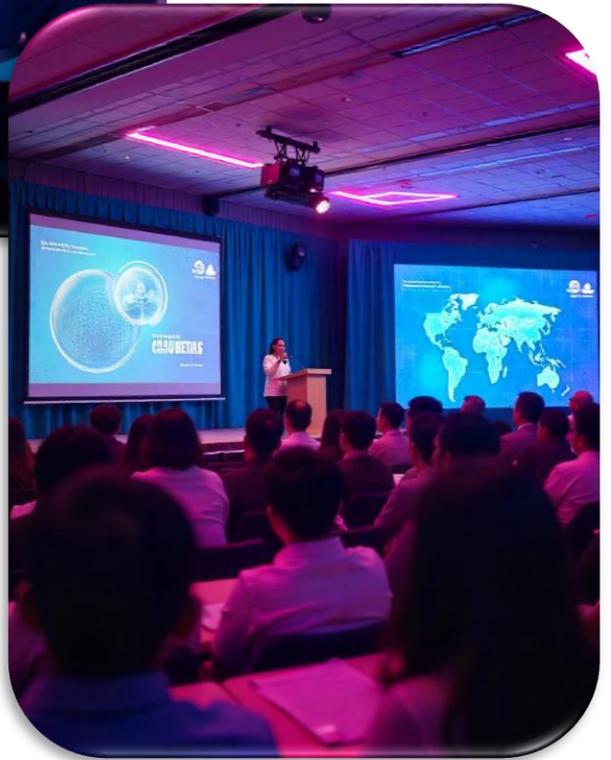
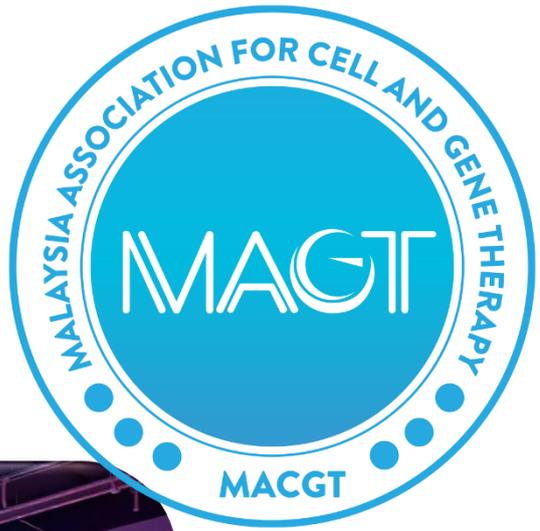
Dr. Kuo holds patents related to the activation of AMP-activated protein kinase (AMPK), applying his research to develop methods for treating relevant diseases, showcasing his commitment to translating scientific findings into practical applications.

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**02 NOV 2024** Venue: Nexus Connection, Bangsar South

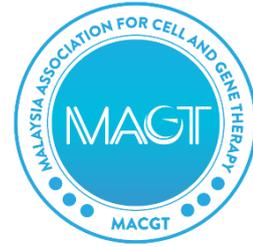
# MAGGT MEMBERS 2024



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**12<sup>th</sup> ANNUAL MAGGT SYMPOSIUM**

**02 NOV 2024** Venue: Nexus Connection, Bangsar South



### **Cryocord Sdn Bhd**

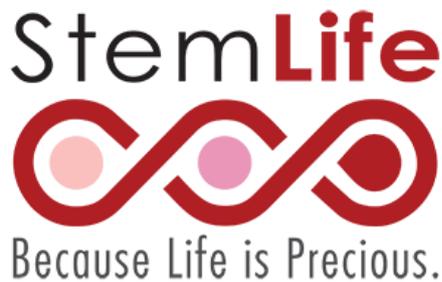
Established in 2002, CryoCord Group is one of the largest and most comprehensive private cell and gene therapeutics companies in the Southeast Asia, with emphasis in advanced research and development.

As a fully licensed stem cell bank under the Private Healthcare Facilities and Services (PHFS) Act 1998 by the Ministry of Health (MOH), CryoCord houses 10 Grade B (ISO Class 5) cleanrooms and a Biosafety Level 2 (BSL-2) facility. Our state-of-the-art laboratory is accredited by AABB and certified to cGMP in accordance with PIC/S standards set by the NPRA, a division of MOH Malaysia.

CryoCord Group holds multiple patents in cell-based technologies and has received several approvals from the MOH for clinical trials involving mesenchymal stem cells and CAR T-cells.

Address: Suite 1 -1, 1st Floor, Bio – X Centre,  
Persiaran Cyberpoint Selatan,  
Cyber 8, 63000 Cyberjaya, Selangor, Malaysia

Website: [www.cryocord.com.my](http://www.cryocord.com.my)



### **Stemlife Berhad**

Established in 2001, StemLife Berhad (“StemLife” or the “Company”) is Malaysia’s pioneer private stem cell bank. The Company is a subsidiary of Cordlife Group Limited (“Cordlife”, together with its subsidiaries, the “Group”), a Singapore Exchange-listed company that operates the largest network of stem cell banks in Asia and has earned the trust of over 600,000 parents. StemLife and the Group have facilitated cord blood releases to 18 healthcare institutions across 10 countries, supporting stem cell transplants and cellular therapies. StemLife is committed to ensuring that their clients can use their cord blood anywhere in the world by obtaining a licence from the Malaysian Ministry of Health and accreditation from the AABB, a global leader in establishing patient safety standards for blood banking, transfusion medicine, blood management, and cellular therapies. Beyond cord blood banking, StemLife offers cryopreservation services for cord lining, cord tissue, and umbilical cord mesenchymal stem cells, along with stem cell expansion through collaboration with a cGMP laboratory. The Company also provides various diagnostic services, including non-invasive prenatal testing (NIPT), chromosomal microarray analysis, newborn metabolic screening and talent genetic screening. For more information, please visit [www.stemlife.com](http://www.stemlife.com)

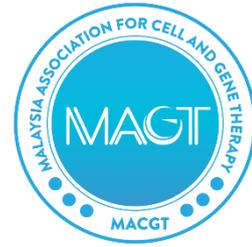
Address: B-8-15, Megan Avenue II, 12 Jalan Yap Kwan Seng, 50450 Kuala Lumpur,  
Malaysia

Website: [www.stemlife.com](http://www.stemlife.com)

**CELL AND GENE THERAPIES FOR MALAYSIA: CHALLENGES & FUTURE PROSPECT!**

**12<sup>th</sup> ANNUAL MACGT SYMPOSIUM**

**02 NOV 2024 Venue: Nexus Connection, Bangsar South**



### **KLSMC Stem Cells Sdn Bhd**

KLSMC Stem Cells Sdn Bhd, a subsidiary of Kuala Lumpur Sports Medicine Centre, was established in 2005 specifically to spearhead the research on stem cells regenerative therapy in the musculoskeletal system. Following internationally recognized medical research ethics and protocols, a series of studies were undertaken culminating in 2007 with the beginning of the human pilot study.

Several clinical studies led by Dr Saw Khay Yong (Consultant Orthopaedic Surgeon and CEO) revealed a breakthrough discovery; in injecting patient's own blood stem cells, coupled with surgical intervention and physiotherapy, it was possible for patients to regenerate hyaline cartilage.

In early 2010, a US patent (patent no: US 8,377,432 B2: Method and composition for neochondrogenesis) was filed for the stem cell technology and it was granted in 2013.

This stem cell technology will be embarking on a US-FDA Phase 3 clinical trial in the near future. This innovative technology has the ability to treat large cartilage lesions, including bone on bone lesions, delay the need for total knee replacement in younger patients and enabling patients to return to relatively active lifestyle. In addition to this patent, the company has also several other international patents granted on Osteotomy and other orthopaedic surgically related instruments

Address: 7th Floor, Wisma Perintis, 47, Jalan Dungun, Damansara Heights, 50490, Kuala Lumpur

Website: <https://klsmc.com>

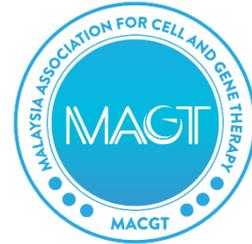
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**12<sup>th</sup> ANNUAL MACGT SYMPOSIUM**

**02 NOV 2024** Venue: Nexus Connection, Bangsar South



Malaysian  
Genomics  
Resource  
Centre



### **Malaysian Genomics Resources Centre Berhad**

Malaysian Genomics Resource Centre Berhad (Bursa Malaysia, ACE, MGRC, 0155) is a leading genomics and biopharmaceutical company based in Southeast Asia. The Group was established in 2004 and listed on the Bursa Malaysia stock exchange in 2010. From pioneering work in genome sequencing, bioinformatics analysis, and genetic screening services, Malaysian Genomics has expanded into the biopharmaceutical sector with the manufacturing of cell therapies including immunotherapy for various types of cancer.

Utilising its high-throughput sequencing lab, advanced microarray facility, and new state-of-the-art cell processing lab, the Group is committed to improving access to the latest in precision and personalised healthcare solutions, which include:

#### **Genome Sequencing and Bioinformatics Analysis Services**

Genome sequencing involves converting biological information contained in DNA into computer data, which can then be studied using bioinformatics analysis. We offer related contract research services for customers across the commercial life sciences, including healthcare, agriculture, plantation, and industrial biotechnology.

#### **Genetic Screening and Molecular Biology Services**

We develop and supply tests used to identify genetic risks associated with diseases (cancer, heart diseases, etc.), health traits (nutrition, fitness, etc.), and adverse reactions to prescription medications. We also provide laboratory services for COVID-19 and other testing.

#### **Immunotherapy and Cell Therapy Products**

We provide cell engineering and production services for various clinical therapies including Chimeric Antigen Receptor (CAR) T-cell immunotherapy for certain blood and solid cancers. We also produce and supply cells for non-clinical use, e.g., for anti-ageing and wellness markets.

#### **Other Services**

**Product Distribution:** We market and distribute laboratory equipment and consumables, and medical consumables.

**Product Development:** We provide R&D or OEM for bespoke genetic tests.

Address: 8F, Jalan Teknologi 316, Taman Sains Selangor, PJU5 Kota Damansara, 47810  
Petaling Jaya

Website: <https://www.mgrc.com.my>  
<https://immunotherapy.life>

**CELL AND GENE THERAPIES FOR MALAYSIA: CHALLENGES & FUTURE PROSPECT!**

**12<sup>th</sup> ANNUAL MACGT SYMPOSIUM**

**02 NOV 2024** Venue: Nexus Connection, Bangsar South



### **Cytomed Therapeutics (Malaysia) Sdn Bhd**

Incorporated in 2018, CytoMed is a biotech company spun off from the Agency for Science, Technology and Research (A\*STAR), Singapore's leading research and development agency in the public sector, and focused on translating its proprietary technologies into cell-based immunotherapy cancer treatments. The development of these novel technologies was inspired by the clinical success of chimeric antigen receptor-modified T (CAR-T) cells in treating hematological malignancies and introduces solutions for the clinical limitations and commercial challenges inherent in extrapolating the CAR-T principle into treatments for solid tumors.

The development of CD19-targeting CAR-T cells to treat B-cell malignancies underscores cellular immunotherapy's increasingly essential role in cancer care. However, the therapies in use today face several challenges that include: reliance on a patient's limited cell quality and quantity, the lack of "safe" surface cancer antigens and their recognition system, and the limited success rate of relying on a single antigen-targeting strategy. Applying the current CAR-T principle when treating other types of cancers, particularly solid tumors, can be challenging. To this end, we have established two novel, patent-pending patient blood cell-independent therapies to manufacture "off-the-shelf" cell-based cancer immunotherapies: one treatment innovating the CAR-T cell approach and another generating induced pluripotent stem cells (iPSCs) and developing them into cellular therapeutics using our proprietary technologies.

- Donor blood cell-based technology (CTM-N2D therapy\* & CTM-N2D therapy)
- iPSC-derived technology (iPSC- $\gamma\delta$  gdNKT therapy\*)

Fn: \* patent-pending therapies

These therapies exploit the multiple-antigen recognition systems of both natural killer (NK) cells and  $\gamma\delta$  T cells and may be used to recognize and treat a broad range of cancers.

The cellular therapies will be manufactured for clinical trials at a cGMP facility in Johor, Malaysia (near Singapore), in a facility built in accordance with the international PIC/S GMP Standards. The company will directly oversee manufacturing with a well-trained, professional team conducting all essential GMP activities, including manufacture, QC, QA, and documentation.

The leading CAR- $\gamma\delta$  T cell technology, CTM-N2D therapy, is now a clinical trial-ready product set to begin its Phase I trial.

Address: 12, Jalan Permas 9/16, bandar Baru Permas Jaya, 81750 Johor

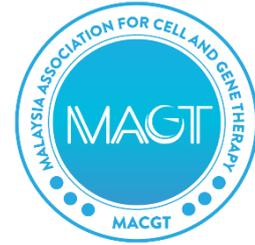
Website: <https://w2.cytomed.sg>

**CELL AND GENE THERAPIES FOR MALAYSIA: CHALLENGES & FUTURE PROSPECT!**

**12<sup>th</sup> ANNUAL MACGT SYMPOSIUM**

**02 NOV 2024** Venue: Nexus Connection, Bangsar South

# CGT<sub>therapeutics</sub>



## **CG Therapeutics Sdn Bhd**

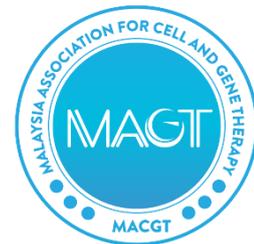
CG Therapeutics (CGT) is established with the aim to provide highest quality and affordable cell and gene treatment solution for cancer and genetic inherited diseases. We are always committed to produce highest quality, safety and affordable cell and gene therapy product.

Address: T2A-18-13 Menara 3, 296 Jalan Ampang, 50450 Kuala Lumpur, Malaysia

Website: N/A

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# Ni'scell



## **Nichi-Asia Life Science Sdn Bhd**

NiSCELL is a Malaysian Biotechnology Company incorporated in 2007 to principally engage in laboratory research on cell based products and developing immunotherapy for cancer and stem cell therapy for regenerative diseases. NiSCELL's technology originated from Japan. Besides being a Bionexus Status company, NiSCELL in 2009 was accredited with GMP (Good Manufacturing Practice) status certified by National Pharmaceutical Regulatory Agency (NPRA) and blood bank licensed by the Ministry of Health Malaysia.

NiSCELL provides a platform for collaborators where there is a potential for cell-based therapy for regenerative disorders.

NiSCELL core strength is to manufacture human peripheral blood derived Natural Killer (NK) Cells, Cytotoxic T Lymphocytes (CTL) and Umbilical Cord-derived allogenic Mesenchymal Stem Cells (MSCs) in order to facilitate their effective use in basic and translational research as well as for future clinical applications.

Our live cell-based products are manufactured in our own cGMP compliant facility and handled by high profile scientists. These products are being pre-clinically investigated for frailty and various cancer treatments.

Address: No. 57, Block F, Jalan Technology 3/9, Bistari 'DE' Kota, Kota Damansara PJU5, 47810 Petaling Jaya.

Website: [www.niscell.com](http://www.niscell.com)

**CELL AND GENE THERAPIES FOR MALAYSIA: CHALLENGES & FUTURE PROSPECT!**

**12<sup>th</sup> ANNUAL MACGT SYMPOSIUM**

**02 NOV 2024** Venue: Nexus Connection, Bangsar South



### **CELL 101 International Sdn Bhd**

Cell 101 International Sdn. Bhd. is a leading Malaysian Cellular Biotechnology company that is paving the way towards enhancement, establishment and regulation of cellular, regenerative & preventive medical technologies as well as therapies. Cell 101's headquarters is currently residing in one of the most distinguished research wings of Universiti Malaya, nestled in the heart of Kuala Lumpur, which highlights our strong collaboration with this world-renowned institution. Cell 101 is also in the midst of establishing the first of its kind Biotech Training Facility as well as a state of the art Research & Production Facility that will showcase some of the most advanced technologies in its facility throughout Asia Pacific.

Our mission is to provide a high-value unit in the next scientific revolution with a vision to be one of the most trusted and reputable organizations in the biotechnology industry. Cell 101 aims to be the benchmark in this fast-paced industry, setting guidelines and protocols to lead cellular biotech to greater heights. It is no mystery today, that cellular technology and therapies are being widely used all around the world, with many positive results and success stories.

However, there is still a lack of understanding and awareness amongst both, providers & recipients, thus creating a gap that needs to be filled. Cell 101 aims to provide the ultimate solution and bridge both, the scientific & medical worlds pertaining cellular tech and concepts.

Our upcoming facility will showcase a modular laboratory mechanism, taking sterility and safety of cellular based products to the next level. This technology will be the first of its kind in Asia Pacific, and Cell 101 intends to introduce this concept not just in Malaysia but to other neighbouring countries as well. Using a cyto-centric mechanism, full focus and priority will be given to the culture methods and transportation of all cellular products, reducing any form of contamination and ensuring more stable outcomes. This will be the stepping stone in creating an international guideline and to serve as the benchmark for production & culture of cellular products. Due to complete by the end of 2024, it is a project that we are all looking forward to. Our products include the cutting edge Human Wharton-Jelly Stem Cells for clinical trials and regenerative therapy, immune cells such as Natural Killer Cells, exosomes & other growth factors, epigenetic profiling of biological age and other active nutraceutical ingredients for various applications with a logistics and sales reach internationally. Our target clients are functional & lifestyle medicine clinics, medical centers, hospitals and other biotech companies.

Besides, we are also involved in designing industry relevant bespoke curriculum & training programmes in the areas of biotechnology, molecular biology, regenerative medicine and healthcare for academic and professional certificate programs.

**CELL AND GENE THERAPIES FOR MALAYSIA: CHALLENGES & FUTURE PROSPECT!**

**12<sup>th</sup> ANNUAL MACGT SYMPOSIUM**

**02 NOV 2024** Venue: Nexus Connection, Bangsar South

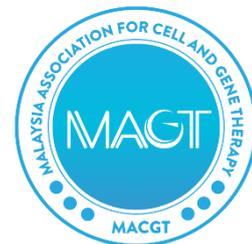
### Continue...

We have formed a cohesive and comprehensive support unit for our clients & business partners, allowing them to participate and grow with us for mutual benefit as well as to provide optimal solutions for the public. With all the resources and data that we have amassed, it is undeniable that cellular biotechnology will be the next big thing in the medical & scientific arenas, opening up tremendous opportunities for providers and related businesses. Utilizing the best methods and technologies are undeniably the keys to determining the future of cellular biotechnology. Cell 101 shall strive as the frontier of cellular biotechnology, and is ready to serve our clients and partners to our fullest capacity.

Address: Block B-0-9, Casa Tropicana, No. 5 Jalan Persiaran Tropicana, Tropicana Golf and Resort, 47410 Petaling Jaya, Selangor Darul Ehsan

Website: [www.cell101.com.my](http://www.cell101.com.my)

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### Intran Technologies Sdn Bhd

Intran Technologies Sdn Bhd.(Pvt.)Bhd.(Ltd.) is a wholly owned Malaysian company. It started business in 2014 and provides products and services in two areas:

#### 1) ENGINEERING

On the engineering side of business ITSB provides design, engineering and construction services for GMP (Good Manufacturing Practices)/GTP (Good Tissue Practices) compliant facilities for Regenerative Medicinal Production & Gene Therapy

#### 2) SYSTEMS

On the products/systems side of business ITSB offers specialized equipment in industrial drying technologies, environment management systems and continuous sterilization.

Markets covered for drying technologies include the following industries:

- Food and Beverage
- Chemicals and Oleochemicals
- Ceramics
- Paints
- Feed

Markets covered for environment management systems include the following:

- Food and Beverage
- Hospitals

Markets covered for continuous sterilization systems include the following industries:

- Spices & Herbs, Seeds & Nuts

Address: Intran Technologies Sdn Bhd, 33 Block L, Jalan PJU 1A/1, Taipan ,  
Damansara 2 Parcel 3, Ara Damansara, 47301 Petaling Jaya, Selangor

**CELL AND GENE THERAPIES FOR MALAYSIA: CHALLENGES & FUTURE PROSPECT!**

**12<sup>th</sup> ANNUAL MACGT SYMPOSIUM**

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Company Website : <https://www.bio-techne.com/>



### Company Description

Bio-Techne is headquartered in Minneapolis, Minnesota and employs over 3,000 people globally at 34 locations worldwide. As a global developer, manufacturer and supplier of high-quality reagents, analytical instruments and precision diagnostics, Bio-Techne has an extensive catalog of over 500,000 products. Incorporated in 1981 as R&D Systems, the company changed its name to Bio-Techne in 2014. Our growth has been accelerated through acquisitions, organic investments, diversification of our customer base and expansion into new markets. In fiscal year 2023, Bio-Techne delivered net sales of over \$1.1 billion. Bio-Techne includes the following brands: ACD, Asuragen, ExosomeDx, Lunaphore, Novus Biologicals, ProteinSimple, R&D Systems and Tocris Bioscience.

**CELL AND GENE THERAPIES FOR MALAYSIA: CHALLENGES & FUTURE PROSPECT!**

**12<sup>th</sup> ANNUAL MACGT SYMPOSIUM**

**02 NOV 2024** Venue: Nexus Connection, Bangsar South



Company Website : <https://www.escolifesciences.com/>

#### Company Description

The Esco Group of Companies is a leading global life science, IVF medical, and biopharma equipment provider with sales in over 100 countries worldwide. Esco was founded in 1978 by Singaporean pharmacists Lim Lay Yew and Low Yae Foong to manufacture clean room products for Singapore's electronics industry. It quickly expanded, designing the first laminar flow clean bench and a microelectronics class 10,000 cleanroom for Siemens Corporation. Esco later grew into the pharmaceutical, life sciences, biotechnology, and medical research markets in Malaysia and Indonesia through Esco Micro (M) Sdn Bhd and PT Esco Bintan Indonesia.

Esco Malaysia provides laboratory equipment and solutions, serving industries such as pharmaceuticals, biotechnology, and healthcare. Specializing in manufacturing, sales, and maintenance of high-quality lab equipment, the company also offers technical support and training. Esco's business spans three units: Esco Scientific (laboratory technology), Esco Medical (IVF solutions), and Esco Healthcare (biotech and pharma support). Its product range includes biological safety cabinets, CO2 incubators, fume hoods, and more, along with installation, maintenance, and calibration services to ensure optimal performance in labs across various scientific disciplines.

**CELL AND GENE THERAPIES FOR MALAYSIA: CHALLENGES & FUTURE PROSPECT!**

**12<sup>th</sup> ANNUAL MACGT SYMPOSIUM**

**02 NOV 2024** Venue: Nexus Connection, Bangsar South

# Silver Sponsors



Company Website : [www.myfisherstore.com/malaysia](http://www.myfisherstore.com/malaysia)

## Company Description

As the premier scientific marketplace, the Fisher Scientific channel has defined choice and convenience for over a century. We keep science moving forward by offering over 2.5 million products and extensive support services to the research, production, healthcare, and science education markets around the world.

Count on us for all the elements you need to accelerate innovation, enhance productivity, and increase speed to market, including:

- Exceptional customer care from our industry-leading product assistance and support team
- A purpose-built global warehouse and distribution network designed around the safe handling, storage, and transportation of scientific products and production materials—delivering the supply security to simplify procurement, mitigate risk, and support your cGLP and cGMP requirements
- Fast, easy, and efficient B2B e-procurement and online order fulfillment
- Exclusive services and programs that ensure product availability, consistency, and value—like tailored logistics and production solutions, on-site inventory management and support services, special offers, and more—while making a difference with supplier diversity and sustainability strategies that support your values

**CELL AND GENE THERAPIES FOR MALAYSIA: CHALLENGES & FUTURE PROSPECT!**  
**12<sup>th</sup> ANNUAL MACGT SYMPOSIUM**  
**02 NOV 2024** Venue: Nexus Connection, Bangsar South



Company Website : [www.premierdiagnostics.com.my](http://www.premierdiagnostics.com.my)

### Company Description

Premier Diagnostics Sdn Bhd, established on January 25, 1997, has transformed into a leading "Products and Solution Provider" in the medical and industrial sectors. Since our inception, we have built a reputation for delivering top-quality products and services, expanding our market reach to Singapore in 2009, and to Indonesia and Thailand in 2019.

Our vision is to be a Malaysia-renowned one-stop diagnostics provider, committed to offering affordable healthcare solutions while maintaining the highest quality standards. Customer satisfaction is at the core of our mission.

Our dynamic and dedicated team is focused on serving the diagnostics market with fast service and high-quality products at competitive prices. Our commitment to efficiency ensures that our customers receive their solutions promptly, while our wide range of premium products meets the diverse needs of the medical and industrial sectors. We proudly cater to a diverse clientele, including government agencies, hospitals, research centers, private clinics, food industry firms, and public laboratories.

**CELL AND GENE THERAPIES FOR MALAYSIA: CHALLENGES & FUTURE PROSPECT!**  
**12<sup>th</sup> ANNUAL MACGT SYMPOSIUM**  
**02 NOV 2024** Venue: Nexus Connection, Bangsar South



**Company Website :**

**Company Description**

"With over 15 years of experience in the laboratory industry, we are your trusted partner for comprehensive laboratory solutions. Our expertise spans from lab equipment supply and after-sales services to consultation, maintenance, repair, and calibration of premium laboratory equipment.

We specialise in serving the life sciences, cell culture, and molecular biology sectors, providing a wide range of equipment to meet the unique needs of these industries. Our team of experienced professionals is dedicated to delivering exceptional service and ensuring the highest standards of quality in our products and services.

Whether you require a new laboratory setup, equipment maintenance, or expert consultation, we are committed to providing quality products that drive your research and development efforts."

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**12<sup>th</sup> ANNUAL MACGT SYMPOSIUM**  
**02 NOV 2024** Venue: Nexus Connection, Bangsar South



**Company Website :** [www.analisa-scientific.com](http://www.analisa-scientific.com)

### **Company Description**

Analisa Resources (M) Sdn Bhd Founded and incorporated in 1999 with More than 100 years of collective experience delivering best in class service to our customers. We are noted for our comprehensive solutions involving instruments, chemistries, consumables, software and technical services; enabling an integrated laboratory workflow solutions for scientific discovery in the life sciences, analytical testing and diagnostic markets. Our customers are scientists engaged in research and testing including government institutions, academia, biotechnology companies, food, pharmaceutical and chemical industries as well as hospitals. We measure our success by our ability to help our customers achieve their scientific goals. We start every measurement with our customers. We Integrated into the EverLife Group in January 2022.

Everlife is one of Asia's leading market access and distribution partners for Clinical Diagnostics and Scientific Solutions. Everlife Vision is to advance health and quality of life in Asia by improving access to health technology and science and our mission is To improve access to the diagnostic and scientific technology that improves health, quality, environmental and safety outcomes. Our COMMITMENT is to Build Strong Relationships with Business Partners, Invest in the Region & Bring the Best Solutions to Our Customers

We are proud to be partners with Abcam, FujiFilm Wako, Kogene Biotech, LGC Biosearch, QIAGEN, ThermoFisher to deliver the Best in Class Solutions to the scientific community.

Visit our website [www.analisa-scientific.com](http://www.analisa-scientific.com) for more information

**CELL AND GENE THERAPIES FOR MALAYSIA: CHALLENGES & FUTURE PROSPECT!**  
**12<sup>th</sup> ANNUAL MACGT SYMPOSIUM**  
**02 NOV 2024** Venue: Nexus Connection, Bangsar South



**Company Website :**

### **Company Description**

AHS Laboratory Supplies has evolved into a reliable and a long term service provider for customers in the life sciences and pharmaceutical manufacturing industry from its establishment in 2007. We have remained a compact organization so as to be able to focus in providing responsible and sustainable solutions and supporting it with critical after sales support from our inception

The founder and the present team have a cumulative experience of more than 45 years in the laboratory equipment supplies and support services, which covers consultative selling and comprehensive service packages

Our strengths are in supporting customers in these niche market segments, cell culture and pharmaceutical technology. In cell culture, we cater to the needs of those in R&D, IVF, Tissues Engineering, Cell and Gene Therapy and Regenerative Medicine subsegments

In the pharmaceutical, food supplement and traditional medicine, manufacturing sector, we cater for their Research and Development, Quality Control, Stability and In Process Quality Assurance equipment requirements

The continuous support we have received from our customers spanning 18 years has validated our core values rooted in this simple acronym

CARE : C - Competency, A – Adaptable, R- Responsible and E - Extra mile

A **competent** team, being **adaptable** to changes in the market, while always providing **responsible** solutions and seeking to go the **extra mile** to deliver our solutions

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**12<sup>th</sup> ANNUAL MACGT SYMPOSIUM**

**02 NOV 2024** Venue: Nexus Connection, Bangsar South



**Company website:** <https://www.investselangor.my/>

### **Company Description**

Invest Selangor Berhad is a one-stop agency that provides information, advisory services, as well as start-up or expansion assistance to potential and existing investors. It has been a beacon for investors from all across the world who wish to invest and prosper in Selangor.

Invest Selangor will continually strive to create a conducive, investment-friendly environment through the creation of new networks, services, and competitive incentives provided by the Malaysian Investment Development Authority (MIDA)—continually showcasing to the world the dynamic, golden state of Selangor.

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**12<sup>th</sup> ANNUAL MACGT SYMPOSIUM**  
**02 NOV 2024** Venue: Nexus Connection, Bangsar South

# Notes

**MALAYSIA ASSOCIATION FOR CELL AND GENE THERAPY**

(PPM-014-10-15022012)

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