



M Tech Labs HK

核磁科技(香港)有限公司

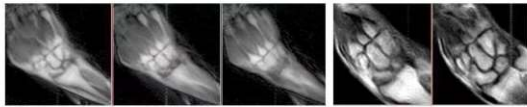
MRI for Everyone!

The First Breakthrough Portable MRI Scanner in the World

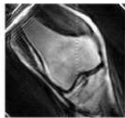


- The revolutionary "gradient-free" MRI technology eliminates all magnetic field gradient components, reducing the machine weight to 60-80 Kg (about the same size as the ultrasound machine next to it);
- Non-invasive; no radiation, open space design, no noise;
- AI-assisted automatic screening, real-time 3D imaging for moving objects;
- Low manufacturing cost and zero maintenance costs (no coolant required);

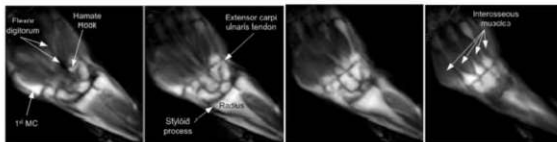
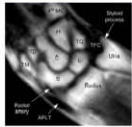
Image Clarity Has Achieved Diagnostic Grade - FDA 510(K) Filing



Wrist
MRI



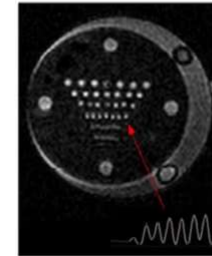
Knee
MRI



Typical anatomical features of the wrist are identified: APLT, abductor pollicis longus tendon; C, capitate; H, hamate; L, lunate; MC, metacarpal; S, scaphoid; TD, trapezoid; TFC, triangular fibrocartilage; TM, trapezium; TQ, triquetrum.

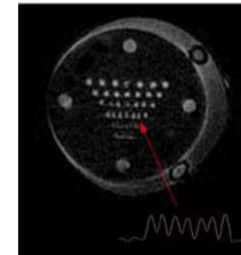
Comparison (no differences! – same quality):

Standard phantom imaging (with heavy magnet and acoustic noise)



Conventional 1.5T MRI
10-12 Ton

Our technique: small magnet, no acoustic noise



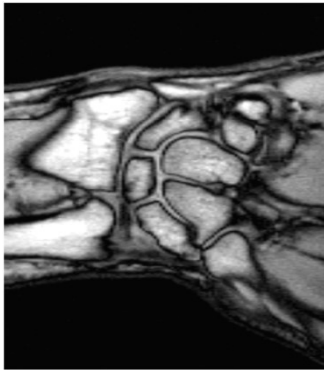
M Tech Portable MRI
60-80 Kg

US FDA:
Thailand/Singapore/Indonesia Filing:
Japan PMDA:
CE Marking:
China NMPA:

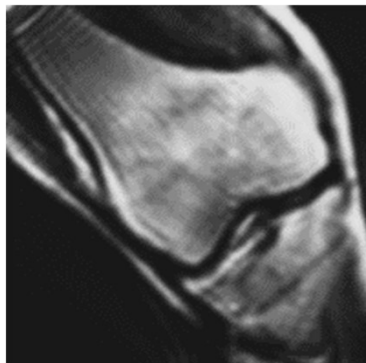
Ongoing 510(K) registration;
Q2/2024;
Q2/2024;
Q2/2024;
Q3/2024;

Image Comparison with Standard MRI

Wrist



Knee



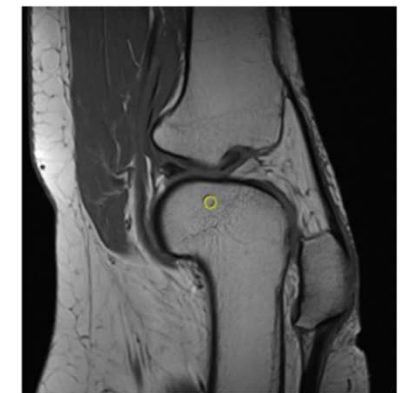
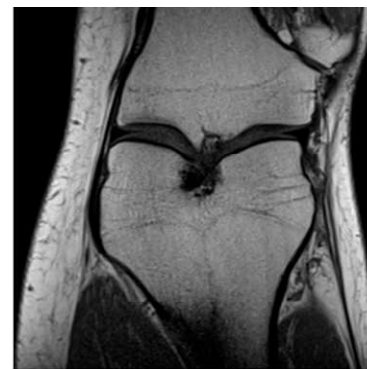
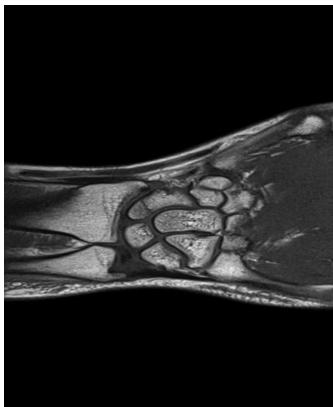
Knee



Knee



M Tech Portable MRI



Siemens Magnetom Essenza 1.5T MRI

GE 1.5T MRI

POCT (Point-of-Care Testing) at the Patient's Bedside

1. Large Tertiary Hospitals:
 - a. Large-scale application in stroke wards, cost-effective in post-surgery monitoring and evaluation; ICU (for bedbound post-surgery patients requiring periodic 24, 36 or 48 hours' follow-up monitoring and evaluation; during real-time surgery: the surgeons can observe the structure of the local brain tissue while performing the operations;
 - b. Physicians normally prefer MRI to CT as MRI is more accurate in post-surgery monitoring and evaluation, plus unlike CT and PET, MRI has no radiation risk;
2. Small and Medium-Sized Hospitals:
 - a. With the assistance of portable MRI, surgeons in regional/county level hospitals can reduce the operations time for acute artery occlusion surgery by half to less than 10 minutes;
 - b. Portable MRI can conduct quick and simple diagnosis for patients in remote regions;
3. Portable MRI can produce diagnostic images in minutes, in ambulance, for continuous scanning of joints, or in emergency rooms,
4. Children's Hospitals: portable MRI is user-friendly to children accompanied by their parents;
5. Extensive applications in military hospitals during war and peace times;
6. Physical examination: community-based disease screening and diagnostics for people (e.g. neurological diseases & early-stage tumors) and pets;
7. Early detection & long-term monitoring of Alzheimer's, Parkinson's, dementia, etc.

Team

Brian Mok, MBA – Chairman of the Board and Group CEO

- Mr. Mok has hold senior management positions in multiple institutions, with more than 20 years of industry experience in capital markets, corporate restructuring, financial services, business development, management consulting and institutional financing;
- Previously worked at Canadian Imperial Bank of Commerce (CIBC), Scotiabank and Jefferies Financial Group in Canada, holding management and operations positions in brokerage services, foreign exchange trade and institutional banking;
- Graduated from the University of Toronto with a bachelor's degree in finance and received an MBA from Edinburgh Business School. Mr. Mok is a financial management consultant and investment manager certified by the Canadian Securities Institute (CSI);



Team

Allen Tang, Ph.D., MBA – CEO, China and Japan



- Dr. Tang has more than 25 years of experience in business development, corporate management, operation and financing in the biomedical field. With a deep understanding of the healthcare industry, he has developed valuable personal networks and business resource in the biomedical industry both at home and abroad,
- Previously responsible for the investment and post-investment management of multiple biomedical projects at several venture capitals. He also worked as the general manager of Shanghai Promega Biological Products Co., Ltd.; the director of Wuxi AppTec's business development & regulatory affairs; a management consultant at Shift Health, a Toronto-based consulting firm; a supervisor at the Smith DNA Sequencing Center, Brigham & Women's Hospital in Boston;
- Dr. Tang obtained an MBA from the University of Toronto, Canada (2001); completed postdoctoral training in immunology at Harvard Medical School (1997-1999); received a PhD in Molecular Pharmacology (1997) as well as a BS in Biotechnology (1992) from the College of Pharmacy, University of Kentucky;

Team

Boguslaw Tomanek, Ph.D. – CSO / CTO



- Served as head of the MRI technical group at the National Research Council of Canada (NRC) for 15 years; improved Canada's international reputation in the field of medical imaging technology;
- Trained 18 postdoctoral fellows, supervised 6 doctoral students, and managed 15 technical staff including 7 research directors, 2 senior staff, and 1 director;
- Published 140+ papers, 200+ conference abstracts, 114 technical reports, granted 6 patents, and received 9 academic awards;
- The Lead inventor of the world's first revolutionary "gradient-free" MRI technology, which eliminates all magnetic field gradient components;
- Dr. Tomanek received a PhD in Physics from the H. Niewodniczanski Institute of Nuclear Physics, Polish Academy of Sciences (1995), a Master in Medical Physics (1988) and a BS in Physics (1986) both from Jagiellonian University, Krakow, Poland;

Team

Kan Lo, M. Sc. – COO



- With 20 years of experience, Mr. Lo is an expert in MRI software development, as well as in the artificial intelligence and algorithm design for automatic image identification and analysis;
- Expert software developer with various programming languages (such as Python, C/C++, LabVIEW);
- Participated in the design and research & development of human neural mechanisms;
- Accumulated rich management experience in R&D and technology integration;
- Mr. Lo received a MS in Electrical Engineering from the University of Calgary, Canada (2012), and he had also won the Queen Elizabeth II College Postgraduate Scholarship twice;

Team

Jonathan Sharp, Ph.D. – VP, Product Development



- A leading MRI researcher of the world, Dr. Sharp has published many groundbreaking papers in journals such as "Nature", "Biomedical NMR", "Scientific Instrument Review", "Medical Magnetic Resonance", and "Medical Imaging", etc.;
- Membership in the National Natural Science Foundation of Canada, the Canadian Institutes of Health Research (2004), the International Society for Medical Magnetic Resonance, the Alberta National Instrument Advisory Council on Embedded Systems, the University of Calgary Animal Care Council (3 years), the Scientific Committee of the Experimental Magnetic Resonance Imaging Center of the University of Calgary (8 years);
- Granted 10 patents, and published 50+ academic papers;
- Dr. Sharp received a PhD in Medical Physics from the University of London (Sutton Royal Marsden Hospital), UK (1989), a Master of Medical Physics from the University of Aberdeen, Scotland (1985), and a Bachelor of Natural Sciences in Physics from the University of Cambridge, UK (1984);

Team

Vyacheslav Volotovskyy, Ph.D. – Director, Product Development

- As an MRI hardware (RF coil) expert, responsible for converting designs into final product, as well as collaborating with external customers to commercialize the developed RF products;
- Specialized in the development of innovative RF coils, and MRI imaging and spectroscopy studies;
- Dr. Volotovskyy received a PhD in Biology (1998) and a Master in Physics (1993), both from Kyiv National University, National Academy of Sciences of Ukraine; published 20+ research papers



Barbara Blasiak, Ph.D. – Director, Nanotechnology Application

- Specialized in magnetic research on core/shell superparamagnetic nanoparticles and development of molecular imaging procedures for CNS tumors;
- Dr. Blasiak received a PhD in Physics from the Institute of Nuclear Physics, Polish Academy of Sciences (2011), and a Master of Physics and Computer Science from the Krakow Normal University, Poland (2006); she was a Postdoctoral Fellow at the Department of Clinical Neuroscience, University of Calgary, Canada (2011-2016);
- Authored 18 papers, 1 book chapter and 50+ presentations, granted 1 patent;



Team

Aaron Purchase, Ph.D. – Director, Technology Development

- Specialized in portable TRASE (Transmit Array Spatial Encoding) MRI technology, overall system design, verification and construction of the Halbach Array, hardware/software, 3D printing technology, as well as the brain diffusion MRI technology in extremely low non-uniform fields;
- Dr. Purchase received a PhD in Medical Physics (2022), and a BS with Honors in Physics (2016), both from the University of Alberta, Canada, as well as a BS in Applied Mathematics from the Memorial University of Newfoundland, Canada (2009); he conducted post-doctoral research at the AA Martinos Center for Biomedical Imaging, Harvard Medical School (2023 - 2024); he published 8 papers, 18+ conference abstracts, 1 technical report, and won 16 academic awards;



Weronika Piedza, Ph.D. – MRI Neuroscientist

- An expert in various biological diagnostic technologies, e.g. atomic force microscopy, electron paramagnetic resonance, absorption & spectroscopy, specialized in animal model research on MRI brain imaging technology & data analysis as well as design, and production of MRI systems (RF coils) and commercial development;
- Dr. Piedza received a PhD in Physics from the Institute of Nuclear Physics, Polish Academy of Sciences (2023), a Master in Biophysics (2009) and BS in Biology (2004) both from Jagiellonian University, Krakow, Poland; and she published 12+ papers and conference abstracts, and won 4 academic awards;



Team

Randy Tyson, Ph.D. – Senior Director, Software & Pulse Sequence

- With extensive experience in magnetic resonance spectroscopy and image data collection and analysis, involved in the development and application of MRI imaging and spectroscopic pulse sequences (including new technologies in low-field magnetic imaging e.g. diffusion tensor imaging and fast imaging);
- Dr. Tyson received a PhD in Biochemistry from the University of Manitoba, Canada (1996), a MS in Chemistry (1989) and a BS in Chemistry (1987) both from the University of Saskatchewan, Canada; and he published 20+papers and 1 patent;



Piotr Liszkowski, Ph.D. – Magnetic Testing Engineer

- Through 3D magnetic field simulation, successfully identified the optimum geometry of the Halbach NMR magnet (50 cm inner diameter) ordered by the Canadian National Research Institute of Biodiagnostics in Winnipeg;
- Also involved in the development of the wrist MRI on the International Space Station;
- Dr. Liszkowski received a PhD in Material Science (1998) and a Master's & Engineer's degree (1991) both from the AGH University of Science and Technology (AGH UST), Krakow, Poland; co-authored 6 papers, 4 conference abstracts, 1 peer-reviewed conference report and 15 MRI hardware technical reports;



Team

Donghui Yin, M.Sc. – Engineer, MRI Engineering & Software

- Experienced in medical device product development, product design, and manufacturing control; as well as in magnetic resonance spectrometers, pulse sequences, control software & system engineering;
- Experienced in regulatory affairs and international standards such as ISO 13485, ISO 9001, FDA filing etc.;
- Mr. Yin received a Master of Biomedical Engineering (MRI) from the University of Saskatchewan, Saskatchewan, Canada, and a BS in Physics from the University of Science and Technology of China, Hefei, China;



Qunli (Charlie) Deng, M.Sc. – Engineer, MRI Software & Operations

- Mr. Deng received both his Bachelor and Master degrees in Electrical Engineering and Computer Science from Peking University, respectively in 1987 and 1990;
- Published 10+ papers;

Global Market for MRI

- A 2008 WHO report stated that 90% of patients worldwide do not have access to MRI due to economic reasons; the overall market size of MRI in 2021 was US\$15.9 billion, with a projected annual growth rate of 5.2% between 2021-2028;
 - The global CAGR is 6.7%, including: the United States 6.1%, Germany 7.9%, the United Kingdom 6.3%, Japan 6.9%, and China 7.0% (these five countries together account for 56.3% of the global market share);

- Central Nervous System (CNS) diseases (Alzheimer's, Parkinson's, stroke, brain injury, etc.) affect one in every six people in the world's population
 - Nearly 1 billion patients, and 6.8 million patients die every year;
 - Epilepsy accounts for 50 million people worldwide, and 55 million people have dementia;
 - Worldwide, 10 million new patients every year, of which 60-70% are elderly;

- The market for diagnosis and long-term monitoring of CNS diseases is projected to grow from US\$10.1 billion in 2019 to US\$18.3 billion in 2027 (CAGR 7.7%);



Sale Projection for Middle East & West Africa



Sale Projection for South East Asia

Partners assisting our Global Market Reach – Phase 1



Mr. Korn Dabbaransi - Thailand

Former Deputy Prime Minister of Thailand – Three Terms

Former Minister of Six Departments, including the Ministry of Health



Mr. Fasihuddin Zuberi – India, Pakistan, Oman

Mr. Wang Guozhen – PRC China

Former Director – China National Social Security Fund Council

Former Director / Chief of Department of the Ministry of Finance

Partners assisting our Global Market Reach – Phase 1



Princess Anne and Sheikh Sayyidi



Sayyadi Ibrahim Sheikh Dahiru Bauchi – 16 West African Countries



Mr. Jean-Claude Van Damme – Central and South African Countries, Belgium



Mr. Rusmin Widjaja – Indonesia, Singapore and Malaysia

Widjaja Family – Indonesia Billionaire Family, Conglomerate Businesses including Healthcare Sector

The China Market

- Due to China's large population and the low number of MRIs per million people, portable MRI will enjoy a huge market demand and growth potential, and governmental support;
 - Government policies on hierarchical diagnosis and treatment and consolidation of medical resources outside major cities — Thousand County Initiative;
 - The State Council's "Guidance on the Comprehensive Reform Pilot of Urban Public Hospitals" lists the mandatory medical equipment for county hospitals to be upgrade;
- In 2017, total 986,649 healthcare institutions nationwide, including,
 - 933,024 primary institutions and 19,896 professional public health institutions;
 - 31,056 hospitals; including 12,297 public hospitals and 18,759 private hospitals:
 - 2,340 tertiary hospitals (1,360 AAA hospitals), 8,422 secondary hospitals, 10,050 primary hospitals and 10,244 unclassified hospitals;
- China is perfecting the hierarchical diagnosis and treatment system, so the equipment of medical imaging devices directed towards small and medium-sized hospitals, and the expedited launch of independent imaging centers in China;
- The published '14th Five-Year Plan for the Development of the Medical Device Industry', specifically mentions the supply of "portable MRI imaging systems";
- As portable MRI caters to the huge unmet clinical needs; if each unit is priced at RMB 1.0-1.5M, the potential market would reach RMB 100 billion;

The Current Industry Landscape

■ Conventional MRI

- High price, bulky, background noise, annual maintenance cost exceeding US\$ 200K;
- Major players i.e. GE, Philips, Siemens, Canon, Toshiba, United Imaging (China) dominate over 90% market;

■ Portable MRI

- Still rely on the conventional gradient technology;



US HyperFine (635 Kg)



China Rayplus (2.4 Ton, 2.6 m²)

■ M Tech is at least 3 years ahead of any competitors in terms of technology/commercialization advantages;

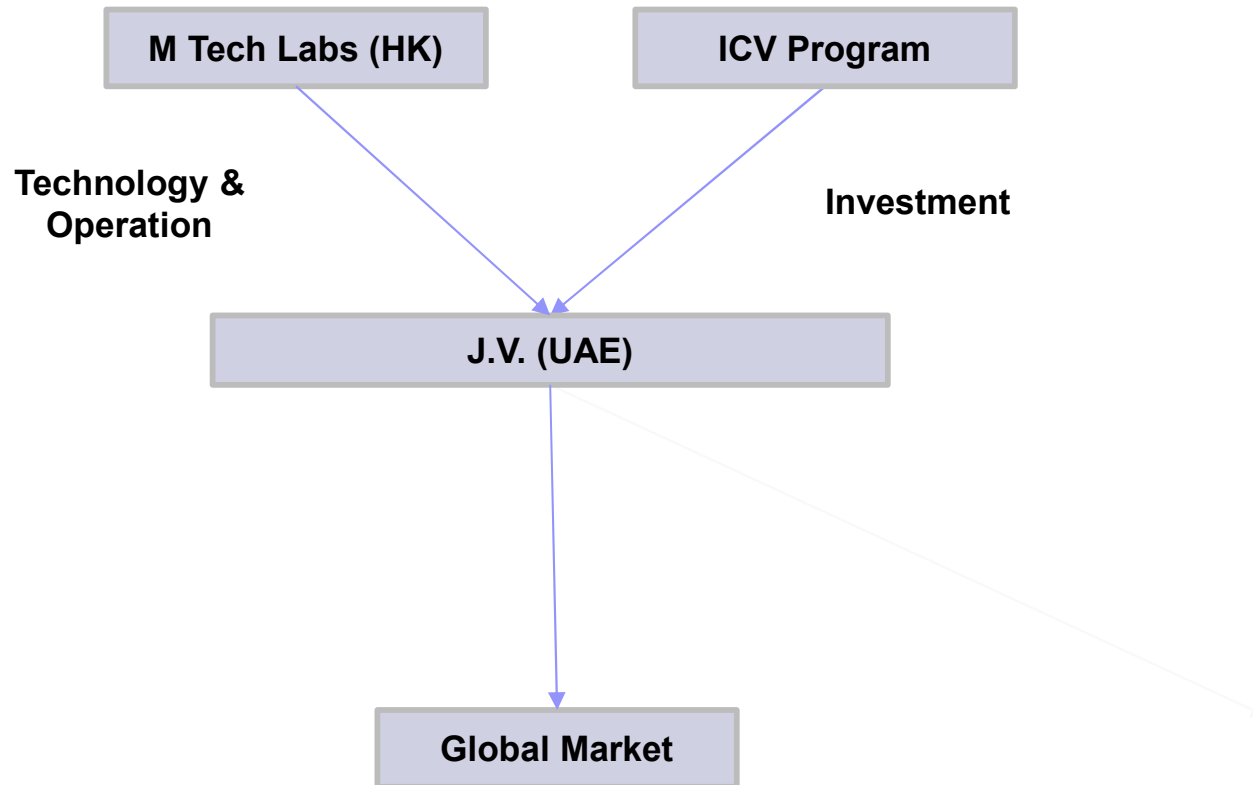
- Revolutionized the industry by creating a new blue ocean market;
- Pioneered the gradient-free technology, no competitors in sight for at least 3 years;
- First mover's advantage --- pre-emptive product launch to quickly dominate the market and establish brand name;



M Tech's Portable MRI Creates a New Market

- **Revolutionized the imaging industry by creating a blue ocean market!**
- **Gradient-free technology — the World's 1st !**
- **The lightest MRI scanner — the World's 1st !**
- **Achieving 1.5mm Slice Thickness on Scans – the World's 1st !**
- **Catering to both human and animal scan!**
- **The first mover advantage!**
- **Establishing market leader position with pre-emptive product launch!**
- **IPO on the ADX!**

Partnership Structure



Partnership Framework

- The JV will be headquartered in either Abu Dhabi or Dubai;
- M Tech Labs HK will contribute its patented portable MRI Technology to the JV, as well as the management of the JV operations with the approval from the JV's Board of Directors consisting of members from M Tech Labs HK and the ICV Program;
- The JV will recruit localized management, manufacturing and sales & marketing staff to target the global market;
- The ICV Program will invest a total of US\$ 10B in the JV at a pre-money valuation of US\$ 15B, in three phases;
 - Phase 1 (US\$ 2B for the start, US\$ 2B within 6 months): JV launch, regulatory filings, team recruitment, establishment of manufacturing facilities; production and sales of 20,000 units per year;
 - Phase 2 (US\$ 4B in 2 years): ramp up of R&D in pipeline expansion & production, achieving annual sale of 50,000 units and preparing for the annual sales of 100,000 units, in addition to launch imaging centers globally;
 - Phase 3 (optional US\$ 2B Pre-IPO investment at the same valuation).



M Tech's Phase 1 Market and Strategic Planning

- **Registration of all Patents; preparation for potential patents**
- **Set up regional offices and JV operations for Sales & Marketing**
- **Target markets South East Asia and Africa and preparation for China launch**
- **Manufacturing facilities for 20,000 systems capacity**
- **Manufacture 20,000 system units to fulfill market demand**
- **Preparation for manufacturing facilities for 50,000 annual systems capacity**



M Tech's Phase 2 Market and Strategic Planning

- **Continuous patent registration**
- **Set up regional offices and JV operations for Sales & Marketing**
- **Target markets Japan, China, India, Pakistan, UAE followed by South America and other developed countries in Europe, North America and the Caribbean countries**
- **Manufacturing facilities for 50,000 system capacity and ramping up to 100,000 systems per annum**
- **Introduce centralized Diagnostic Call Centers globally.**
- **A.I. assisted diagnosis free of charge, monthly subscription for online inhouse radiologist / physician feedback and reports**

M Tech's Phase 3 Market and Strategic Planning

- **Continuous patent registration**
- **Set up regional offices and JV operations for Sales & Marketing**
- **Manufacturing facilities for 100,000 system capacity and ramping up capacity to meet market demand**
- **Continue to establish and build out centralized Diagnostic Call Centers globally.**
- **A.I. assisted diagnosis free of charge, monthly subscription for online inhouse radiologist / physician assessment feedback and reports**
- **Potential for Imaging Clinics launch globally**
- **Introduce Home System – A.I. diagnosis and monthly health plan subscription**

MRI for Everyone!





Thank You!