# FROST & SULLIVAN

# **MEDEZE GROUP RECEIVES THE 2023** COMPANY OF THE YEAR AWARD

Identified as best in class in the Southeast Asia stem cell banking industry

# **Best Practices Criteria for World-Class Performance**

Frost & Sullivan applies a rigorous analytical process to evaluate multiple nominees for each award category before determining the final award recipient. The process involves a detailed evaluation of best practices criteria across two dimensions for each nominated company. The Medeze Group excels in many of the criteria in the stem cell banking space.

AWARD CRITERIA	
Visionary Innovation & Performance	Customer Impact
Addressing Unmet Needs	Price/Performance Value
/isionary Scenarios Through Mega Trends	Customer Purchase Experience
Implementation of Best Practices	Customer Ownership Experience
Leadership Focus	Customer Service Experience
Financial Performance	Brand Equity

## Transforming Stem Cell Banking Services

Founded in 2010 and headquartered in Bangkok, Thailand, the Medeze Group (Medeze) offers newborn (cord blood, placenta, and cord tissue) and adult (fatty tissue and epithelial cells) stem cell banking services. Medeze has an established name across Southeast Asia with ten branches in Thailand, Singapore,

"Medeze's stem cell banking services stand out from competitors because it uses a unique and patented technology that isolates high-quality stem cells from adipose tissue. Medeze's focus on R&D has also led to the creation of novel therapies and treatments yet to be available from other providers."

- Azza Fazar, Research Associate Vietnam, Myanmar, Indonesia, South Korea, Taiwan, Cambodia, New Zealand, and Australia. As one of the region's most experienced mesenchymal stem cell (MSC) banks, the company specializes in stem cellprinted artificial organs and longevity, trademarking itself as a biobanking company.

Stem cell banking transforms treatment options for lifethreatening conditions, such as lymphoma, chronic disorders, e.g., cardiovascular diseases, and degenerative brain diseases, such as Parkinson's and Alzheimer's. Research suggests stem cells can treat

most hematopoietic disorders, immunodeficiency diseases, metabolic disorders, cancer, and degenerative neuromuscular conditions. The Southeast Asia stem cell banking industry is rapidly expanding and evolving to meet the growing demand for advanced stem cell therapies.

#### Opportunities at the Tip of the Spear

With rising chronic disease prevalence, stem cell therapy has emerged as a promising treatment option. Stem cell banking services are crucial for developing and advancing cell and gene therapy (CGT), which uses stem cells to repair and regenerate damaged tissues and organs. As such, the growth of the Southeast Asia stem cell banking industry is tied to CGT developments, which have the potential to revolutionize various disease treatments.

Stem cells can also be used to develop novel therapies that can delay or even reverse age-related diseases, making the Southeast Asia stem cell banking industry a crucial player in longevity. Additionally, the rising blood and immune-related disorder rates in newborns and children demand personalized stem cell banking, enabling the cryogenic storage of their most active stem cells. In 2018, the stem cell market yielded \$700 million in revenues.<sup>1</sup>

Frost & Sullivan projects the stem cell market expanding at a compound annual growth rate of more than 20% from 2020 to 2029 due to stem cell samples lasting in temperature-controlled conditions.<sup>2</sup> Factors such as the rising chronic disease prevalence, increasing awareness about stem cell therapies' potential benefits, and more advanced technologies available for stem cell processing and storage drive the market. Southeast Asia is witnessing significant investments in stem cell research and development (R&D), with countries like China and Japan emerging as key players globally.

However, the industry faces challenges such as stringent regulatory frameworks, ethical concerns, and high costs associated with stem cell banking and therapy. The stem cell banking industry still has several unmet needs, including standardized and scalable manufacturing processes for consistent, high-quality stem cell production. There is also a need for more clinical trials to demonstrate the safety and efficacy of stem cell therapy production for various conditions.

Frost & Sullivan anticipates the Southeast Asia stem cell banking industry's continued growth trajectory driven by the increasing demand for regenerative medicine and personalized healthcare solutions.

In 2021, Frost & Sullivan recognized Medeze for its groundbreaking R&D initiatives, innovative offerings, and growth potential and remains impressed with the company's continuing innovation and sustained leadership.

## Demonstrated Leadership through Continuous Product Innovation

Medeze's vision centers on becoming pioneers in longevity. With the stated purpose of continuous research and innovation, the company secures the latest advances in stem cell banking and regenerative medicine. It connects deep-seated domain and operational knowledge with advanced technology and services to deliver innovative stem cell banking services.

<sup>&</sup>lt;sup>1</sup> Strategic Commercial Partnerships Transforming the Global Biobanking Market, 2020-2026; Frost & Sullivan, (August 2021) <sup>2</sup> Ibid.

## Immune Cell Therapy

Natural Killer (NK) cells are a type of immune cell that can recognize and destroy abnormal cells, including cancer cells. Medeze's NK cell therapy involves using the patient's NK cells, which come from their blood, expanding and activating these cells in the lab, and then reinfusing them into the patient's body. This approach has shown promising results in treating various types of cancer, including solid tumors.

The company's NK cell therapy is based on the latest immunology and personalized medicine research, providing a tailored treatment approach that maximizes effectiveness while minimizing side effects. Its state-of-the-art facilities and advanced technology ensure that NK cells are processed and stored optimally, enhancing their potential for future use. Medeze's NK cell therapy is part of a growing trend toward personalized medicine and represents a significant step forward in treating complex and difficult-to-treat conditions.

The company's NK cell therapy is a testament to its commitment to innovation and excellence in healthcare. Medeze's cutting-edge solutions, advanced technology, and personalized service make it a valuable partner for individuals and families seeking to improve their health and well-being.

### Stem Cell-Printed Cornea

Medeze has developed stem cell banking solutions after years of research, including internal studies and third-party medical research findings. Its R&D division, Singapore Medical Innovative Technology Pte. Ltd., studies the feasibility of creating three-dimensional (3D) printed stem cell corneas. The company successfully made its first 3D-printed cornea using adipose stem cells and fish collagen.

By utilizing cutting-edge 3D printing technology and stem cell research, Medeze creates a synthetic cornea that can replace damaged or diseased human corneas. The company's recent announcement of completing the first animal study for artificial organs is a significant milestone. It marks a major step towards creating fully functional artificial organs for patients. With continued R&D, Medeze Group's innovative approach to regenerative medicine impacts the lives of millions of people worldwide who need organ transplants.

With a legacy of innovative leadership, the company's compelling value proposition underpins its sustained success.

#### Roadmap to Success: Continuous & Proactive

Medeze's stem cell banking services exceed its extensive expertise and best-in-class capabilities, with customer value as a strategic imperative. Through the years, the company has earned a sterling reputation supporting customers' path toward regenerative and personalized medicine.

Unlike competitors, Medeze builds its services, collaborating closely with various stakeholders and partners to evolve alongside market needs and trends. Its stem cell banking services stand out from competitors because it uses a unique and patented technology that isolates high-quality stem cells from adipose tissue. The company's focus on R&D has also led to novel therapies and treatments yet to be available from other providers. Thus, Medeze's commitment to innovation and excellence sets it apart from other companies in regenerative medicine.

#### BioLongevity

In July 2022, Medeze and Udon Plastic Surgery launched a new service called BioLongevity, which provides stem cell banking services to customers in Thailand. The service allows individuals to store their stem cells for future use in regenerative medicine treatments. The company's patented technology isolates high-quality stem cells from adipose tissue, applying the stored stem cells to various regenerative medicine treatments, including hair restoration and anti-aging treatments. The launch of BioLongevity expands Medeze's presence in the Thai market and further solidifies its position as a leader in regenerative medicine within Southeast Asia.

Trademarking itself as a BioLongevity service provider, the company offers an innovative solution for patients who wish to improve their organs' functions and achieve a longer lifespan. The service involves storing stem cells from the patient's placental tissue as a baby, which can be used later in life to regenerate and repair damaged tissues and organs. This regenerative medicine process shows significant potential for improving health and extending lifespan.

BioLongevity is particularly relevant for individuals in their 20s or 30s who want to take proactive measures to live longer and healthier. Patients can maximize their potential for future regenerative therapies by banking their stem cells early. Medeze's service represents a significant leap forward in personalized healthcare and has the potential to revolutionize the way we think about aging and longevity.

The company's transparent and non-adversarial approach and close relationships position it as a partner of choice.

### A Foot in the Present and an Eye on the Future

Since its inception, Medeze's sterling reputation and customer-centric framework have led to its coveted preferred partner status. Over the years, it added a range of new partners to its established base.

In March 2023, the company announced further stem cell cooperation with the Ratchaphruek Hospital in Thailand. The collaboration will focus on developing regenerative medicine treatments using stem cells,

"The agreement between Medeze and the Ratchaphruek Hospital will expand the availability of cutting-edge stem cell treatments to patients in Thailand and further solidify Medeze's position as a leader in regenerative medicine."

- Azza Fazar, Research Associate mainly for joint and bone disorders. The partnership will also explore using stem cells in other areas, such as dermatology and anti-aging treatments. The agreement between Medeze and the Ratchaphruek Hospital will expand the availability of cutting-edge stem cell treatments to patients in Thailand and further solidify its position as a leader in regenerative medicine.

As it prepares for public listing in March 2023, the company seeks partnerships with clinics performing

liposuction. Collaborations with such clinics will enable Medeze to offer stem cell banking services to those undergoing the procedure, as stem cells are extracted from the fats taken out.

Frost & Sullivan believes the company is well-positioned to drive the stem cell banking and longevity space into its next growth phase, capturing market share and sustaining its leadership in the coming years.

# Conclusion

The stem cell banking industry still has several unmet needs, including standardized and scalable manufacturing processes for producing consistent, high-quality stem cell products. There is also a need for more clinical trials to demonstrate the safety and efficacy of stem cell therapies. Overall, the Medeze Group (Medeze) addresses these unmet needs with a strong leadership focus that incorporates customer-centric strategies and exemplifies best practice implementation.

Medeze's banking services exceed its extensive expertise and best-in-class capabilities, with customer value as a strategic imperative. Through the years, the company has earned a sterling reputation supporting customers' path toward regenerative and personalized medicine. It remains a trusted partner, earning a reputation for offering the overall best in the stem cell banking market, with BioLongevity as a game changer. In the last five years, Medeze formed impactful partnerships with healthcare service providers, such as Udon Plastic Surgery and Ratchaphruek Hospital, which can leverage and spread awareness about its services.

With its strong overall performance, Medeze Group earns Frost & Sullivan's 2023 Southeast Asia Company of the Year Award in the stem cell banking industry.

# What You Need to Know about the Company of the Year Recognition

Frost & Sullivan's Company of the Year Award is its top honor and recognizes the market participant that exemplifies visionary innovation, market-leading performance, and unmatched customer care.

## **Best Practices Award Analysis**

For the Company of the Year Award, Frost & Sullivan analysts independently evaluated the criteria listed below.

## Visionary Innovation & Performance

Addressing Unmet Needs: Customers' unmet or under-served needs are unearthed and addressed by a robust solution development process

Visionary Scenarios Through Mega Trends: Long-range, macro-level scenarios are incorporated into the innovation strategy through the use of Mega Trends, thereby enabling first-to-market solutions and new growth opportunities

**Leadership Focus**: Company focuses on building a leadership position in core markets and on creating stiff barriers to entry for new competitors

**Best Practices Implementation**: Best-in-class implementation is characterized by processes, tools, or activities that generate a consistent and repeatable level of success

**Financial Performance**: Strong overall business performance is achieved in terms of revenue, revenue growth, operating margin, and other key financial metrics

## **Customer Impact**

**Price/Performance Value**: Products or services provide the best value for the price compared to similar market offerings

**Customer Purchase Experience**: Quality of the purchase experience assures customers that they are buying the optimal solution for addressing their unique needs and constraints

**Customer Ownership Experience**: Customers proudly own the company's product or service and have a positive experience throughout the life of the product or service

**Customer Service Experience**: Customer service is accessible, fast, stress-free, and high quality

**Brand Equity**: Customers perceive the brand positively and exhibit high brand loyalty

## **About Frost & Sullivan**

Frost & Sullivan is the Growth Pipeline Company<sup>™</sup>. We power our clients to a future shaped by growth. Our Growth Pipeline as a Service<sup>™</sup> provides the CEO and the CEO's growth team with a continuous and rigorous platform of growth opportunities, ensuring long-term success. To achieve positive outcomes, our team leverages over 60 years of experience, coaching organizations of all types and sizes across 6 continents with our proven best practices. To power your Growth Pipeline future, visit Frost & Sullivan at http://www.frost.com.

## The Growth Pipeline Engine™

Frost & Sullivan's proprietary model to systematically create ongoing growth opportunities and strategies for our clients is fuelled by the Innovation Generator<sup>™</sup>. Learn more.

## Key Impacts:

- **Growth Pipeline:** Continuous Flow of Growth Opportunities
- **Growth Strategies:** Proven Best Practices
- Innovation Culture: Optimized Customer Experience
- **ROI & Margin:** Implementation Excellence
- Transformational Growth: Industry Leadership

## The Innovation Generator™

Our 6 analytical perspectives are crucial in capturing the broadest range of innovative growth opportunities, most of which occur at the points of these perspectives.

## Analytical Perspectives:

- Mega Trend (MT)
- Business Model (BM)
- Technology (TE)
- Industries (IN)
- Customer (CU)
- Geographies (GE)



