

IMAGENE AI RECEIVES THE 2023 TECHNOLOGY INNOVATION LEADERSHIP AWARD

*Identified as best in class in the European AI-based
molecular testing for cancer diagnosis space.*

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. Imagen AI excels in many of the criteria in the AI-based molecular testing for cancer diagnosis space.

AWARD CRITERIA	
<i>Technology Leverage</i>	<i>Business Impact</i>
Commitment to Innovation	Financial Performance
Commitment to Creativity	Customer Acquisition
Stage Gate Efficiency	Operational Efficiency
Commercialization Success	Growth Potential
Application Diversity	Human Capital

Imagene AI: Immediate Oncology Intelligence

Founded in 2020 by Dean Bitan, Jonathan Zalach, and Shahar Porat and headquartered in Tel Aviv, Israel, Imagen AI (Imagene) is an innovative provider of artificial intelligence (AI)-based cancer diagnosis and precision medicine planning software for healthcare providers. The company leverages cutting-edge technology and a multidisciplinary team of leading data scientists, biologists, software engineers, and medical experts to enhance innovative technology, advance cancer care, and ensure patients receive the best treatment.

Meaningful Innovation

Backed by world-class subject matter experts, Imagen developed its innovative technology to revolutionize molecular profiling. The company refined its holistic approach to oncology patient care, continuously building its technology to bridge industry gaps. It understands many cancer patients do not always receive the optimal treatment at the right time as current patient diagnosis processes fail to identify all relevant biomarkers, mainly due to dependence on adequate tissue to deliver conclusive results.¹

Responding to this challenge, Imagen developed a genomic testing solution that processes pathological and molecular tests for cancer diagnosis in patients. It leverages AI to detect a range of cancer biomarkers

¹ <https://imagene-ai.com/clinical/>, accessed February 2023

in real-time and generate genomic insights from digitized biopsy images, reducing time-to-results from several weeks to just two minutes.

Leveraging innovative AI, the technology identifies a wide range of biomarkers from the digitize biopsy image alone, optimizing the use of tissue and reducing turnaround time and complex lab processes. Imagené's advanced software solution is scalable and has no limitations regarding access to digital images in real-time from any place and time.

Frost & Sullivan identifies the company's technology as groundbreaking. A strong intellectual property portfolio safeguards Imagené's pioneering technology, adding value relative to its growth potential, thus securing a competitive advantage.

The AI-based molecular diagnostic software scales to streamline cancer care processes and needs. It accelerates cancer diagnosis via accurate, image-based, immediate biomarker profiling, overcoming existing barriers and revolutionizing the market.

Strategic Practices Promoting Successful Operations

Since its launch, Imagené has sought to increase the accessibility of genomic diagnostics to improve cancer care. Imagené can seamlessly integrate its user-friendly software solutions into existing clinical workflows. While currently only under research, once the technology will be commercialized under the required

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**- Ashish Kaul,
Industry Analyst, TechVision**

regulatory requirements, physicians will be able to incorporate immediate biomarker profiling information within the clinical decision-making process at the point of care, thus eliminating current bottlenecks.

Beyond potentially enhanced clinical outcomes, the company also focuses on the emotional aspects of cancer patients and their families. Currently, suspected and diagnosed patients must wait a long time (several weeks) for an initial cancer diagnosis or tumor mutation identification, delaying treatment initiation (critical in

aggressive metastatic cancer cases) and adding stress to an already stressed patient. Multiple clinical pipelines implement Imagené's advanced technology under clinical research, proving clinical value while reducing patient distress by immediately starting treatment. Specifically, Tel Aviv Sourasky Medical Center applies its algorithms to support clinical testing decisions, enabling immediate diagnosis of cancer mutations and therapy initiation.²

The company collaborates with leading medical centers and pharmaceutical companies worldwide to show the value behind its solution. AI-based molecular diagnostics allows healthcare professionals to make accurate therapeutic decisions and provide personalized treatment plans. Additionally, Imagené's AI-based biomarker profiling supports pharmaceutical companies' drug development activities, enabling better patient stratification for clinical trial optimization.

² <https://www.ipost.com/health-and-wellness/article-721679>, accessed February 2023

“We believe that no structure and assumptions should become a barrier to personalized treatment. Imagen brings the potential of accurate, fast, actionable, standardized, and routine profiling to all cancer patients.”³

- Prof. Nir Peled, Director of Oncology, Shaare Zedek Medical Center

Due to its potentially disruptive impact, Frost & Sullivan anticipates rapid, widespread technology adoption. The company’s first-mover status strengthens its position on emerging opportunities.

Bringing Value for Oncologists and Patients

With its customer-led strategy, Imagen consistently brings to market best-in-class technology. While evolving from a technology standpoint, the company never loses sight of its customers’ perspectives. It attracts and interacts with many of its customers through conferences, network events, and partner affiliations fueled by its exceptional operational strategies and technological performance.

Imagen differentiates itself from competing solutions through its proven accuracy. It built the infrastructure and deployment model close to clinical pipelines to validate biomarker detection patterns in clinical settings. The company understands the importance of proving its solution’s distinct value across clinical settings. Imagen conducts several collaborative researches and validations. Lung cancer patients in Ichilov and Sheba medical centers are being tested also with the new technology. A recent scientific paper was published in Modern Pathology together with Sheba Medical Center, the research: "Direct

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***- Pavel Zhebrowski,
Best Practices Research Analyst***

identification of ALK and ROS1 fusions in non-small cell lung cancer from hematoxylin and eosin-stained slides using deep learning algorithms" presented unprecedented accuracy levels that are comparable with the gold standard techniques.⁴

At the same time, the company focuses on understanding how to support oncologists and patients better. It works with leading opinion leaders and oncologists to learn and respond to their actual unmet needs. Imagen recognizes

it must gain the oncologists’ trust for healthcare providers and organizations to embrace its solution fully. The company’s approach, in this case, is showing its technology’s value and credibility in clinical pipelines. It demonstrates a high level of accuracy aligned with the gold standard while substantiating its solution’s standardization and robustness.

Furthermore, Imagen remains informed and close to customers’ experienced needs, collecting feedback, sharing best practices, and driving industry-wide innovations for broader customer success. In 2022, the company raised \$21.5 million in a Series A funding round to accelerate precision oncology.⁵ It strives to increase its global presence while bringing value to physicians and patients in different regions with its robust, reliable, and innovative solution.

³ <https://imagine-ai.com/about/>, accessed February 2023

⁴ <https://www.nature.com/articles/s41379-022-01141-4>, accessed February 2023

⁵ <https://www.globenewswire.com/news-release/2022/05/02/2433366/0/en/Imagen-AI-Secures-21-5-Million-to-Push-the-Boundaries-of-Precision-Medicine-for-Cancer.html>, accessed February 2023

Frost & Sullivan commends Imagene for its ongoing excellence and pioneering leadership role in setting new market trends that address unmet needs in cancer care.

Conclusion

Technology is a critical success factor for the precision medicine industry. Yet, with many options available, market stakeholders need to leverage the most appropriate and best technology-based solutions to optimize treatment outcomes. Imagene AI's (Imagene) innovative artificial intelligence (AI)-based software solution detects a wide range of actionable cancer biomarkers in real-time and generates genomic insights from digitized biopsy images. Accurate, image-based, immediate biomarker profiling reduces time-to-results from several weeks (gold standard) to just two minutes. Imagene stands out from competitors based on its commitment to innovation and creativity while supporting patients and physicians. The company's AI-based biomarker profiling technology accelerates cancer diagnosis via accurate, image-based, immediate biomarker profiling, overcoming existing barriers and revolutionizing the market.

With its strong overall performance, Imagene AI earns Frost & Sullivan's 2023 European Technology Innovation Leadership Award in the artificial intelligence-based molecular testing for cancer diagnosis market.

What You Need to Know about the Technology Innovation Leadership Recognition

Frost & Sullivan's Technology Innovation Leadership Award recognizes the company that has introduced the best underlying technology for achieving remarkable product and customer success while driving future business value.

Best Practices Award Analysis

For the Technology Innovation Leadership Award, Frost & Sullivan analysts independently evaluated the criteria listed below.

Technology Leverage

Commitment to Innovation: Continuous emerging technology adoption and creation enables new product development and enhances product performance

Commitment to Creativity: Company leverages technology advancements to push the limits of form and function in the pursuit of white space innovation

Stage Gate Efficiency: Technology adoption enhances the stage gate process for launching new products and solutions

Commercialization Success: Company displays a proven track record of taking new technologies to market with a high success rate

Application Diversity: Company develops and/or integrates technology that serves multiple applications and multiple environments

Business Impact

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

Customer Acquisition: Customer-facing processes support efficient and consistent new customer acquisition while enhancing customer retention

Operational Efficiency: Company staff performs assigned tasks productively, quickly, and to a high-quality standard

Growth Potential: Growth is fostered by a strong customer focus that strengthens the brand and reinforces customer loyalty

Human Capital: Commitment to quality and to customers characterize the company culture, which in turn enhances employee morale and retention

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- **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)**

