



**2011 European Medical Diagnostics and Imaging Technology,
Technology Innovation Award**





Frost & Sullivan's Global Research Platform

Frost & Sullivan is in its 50th year in business with a global research organization of 1,800 analysts and consultants who monitor more than 300 industries and 250,000 companies. The company's research philosophy originates with the CEO's 360 Degree Perspective™, which serves as the foundation of its TEAM Research™ methodology. This unique approach enables us to determine how best-in-class companies worldwide manage growth, innovation and leadership. Based on the findings of this Best Practices research, Frost & Sullivan is proud to present the 2011 Europe Technology Innovation Award in Ultrasound Imaging for prostate cancer to Advanced Medical Diagnostics SA (AMD), Belgium and Europe.

Significance of the Technology Innovation Award

Key Industry Challenges Addressed by Technology Innovation

Prostate ultrasound and biopsy is used to evaluate the abnormal results of a digital rectal exam (DRE), a relatively simple test to check the prostate or an elevated prostate-specific antigen (PSA) blood test. Prostate ultrasound involves the insertion of a probe about the size of a finger, into the rectum. This probe produces harmless high-frequency sound waves, inaudible to the human ear, that bounce off the surface of the prostate. The sound waves are recorded and transformed into video or photographic images of the prostate gland. The probe provides images at different angles to help doctors estimate the size of the prostate and detect any abnormal growths. A prostate biopsy uses transrectal ultrasound imaging to guide several small needles through the rectum wall into areas of the prostate where abnormalities are detected. The needles remove tiny masses of tissues which are then analyzed in a laboratory. The results help doctors diagnose disorders and diseases in the prostate. If cancer is detected the doctors are able to grade the cancer and determine the stage or likelihood of spreading.

Since the use of early detection tests for prostate cancer has become fairly common, deaths due to prostate cancer have dropped considerably in the last two decades. However, there are limitations in the prostate cancer screening tests used today. Neither the PSA test nor the DRE is 100% accurate. These tests can have abnormal results even when cancer is not present, referred to as false positives. In addition, normal results can occur even when cancer is present, known as false negative results. Moreover the PSA test cannot clearly indicate what stage the cancer is in. Some prostate cancers grow so slowly that they never cause any clinical problems. Because of an elevated PSA level, some men may be diagnosed with a prostate cancer of which they may not have been aware at all.

Advanced Medical Diagnostics SA (AMD) headquartered in Belgium, is a privately held company actively engaged in the development and commercialization of a new technology called HistoScanning™. HistoScanning™ addresses the clinical requirements for tissue characterization. It's first commercially available application is in the management of prostate cancer patients. Prostate HistoScanning™ is a novel ultrasound based application that utilizes advanced tissue characterization algorithms to visualize the position and extent of tissue suspected of being malignant in the prostate gland. In this respect its design is unique and superior to other ultrasound based

technologies. Ultrasound technologies are based on presenting the user with circumstantial evidence for abnormality, which might be correlated with malignancy, for example an hyper, or hypo echoic lesion on the grey scale image, measuring blood flow or measuring tissue stiffness i.e., elastography. However HistoScanning™'s sensitivity and specificity is far superior to these techniques. As an ultrasound based tissue characterization technology HistoScanning™ is accessible to the clinician in his office, as part of the routine workflow and for a wide range of applications.

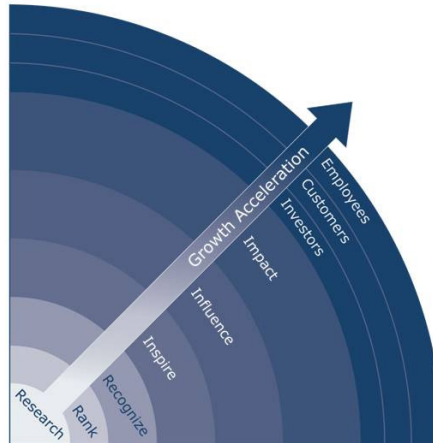
This technology is serving an unmet need in the management of cancer patients and therefore has the potential to significantly change the current clinical pathway for prostate cancer detection and reduce overall costs. In prostate cancer the ability to visualise and locate the suspicious tissue indicates that over diagnosis can be avoided and when needed biopsies can be planned and targeted. Currently, all patients with an elevated PSA have biopsies taken according to a standard pattern in an effort to sample the prostate in a statistically meaningful way. The adoption of Prostate HistoScanning is expected to lead to a significant change in biopsy practice with urologists being able to select patients for biopsy and to direct biopsies to those areas of the gland that are likely to contain malignant tissue. In cancers knowing the extent and location of the tumour prior to surgery will make excision of the tumour and achieving a negative margin more likely with less patients requiring a second surgical procedure and/or post surgery radiotherapy.

Impact of Technology Innovation Award on Key Stakeholders

The Technology Innovation Award is a prestigious recognition of Advanced Medical Diagnostics, SA's accomplishments in Prostate Cancer Ultrasound Imaging. An unbiased, third-party recognition can provide a profound impact in enhancing the brand value and accelerating Advanced Medical Diagnostics, SA's growth. As captured in Chart I below, by researching, ranking, and recognizing those who deliver excellence and best practices in their respective endeavors, Frost & Sullivan hopes to inspire, influence, and impact three specific constituencies:

- **Investors**
Investors and shareholders always welcome unbiased and impartial third-party recognition. Similarly, prospective investors and shareholders are drawn to companies with a well-established reputation for excellence. Unbiased validation is the best and most credible way to showcase an organization worthy of investment.
- **Customers**
Third-party industry recognition has been proven to be the most effective way to assure customers that they are partnering with an organization that is leading in its field.
- **Employees**
This Award represents the creativity and dedication of Advanced Medical Diagnostics, SA's executive team and employees. Such public recognition can boost morale and inspire your team to continue its best-in-class pursuit of technology innovation for Advanced Medical Diagnostics, SA.

Chart 1: Best Practices Leverage for Growth Acceleration



Key Benchmarking Criteria for Technology Innovation Award

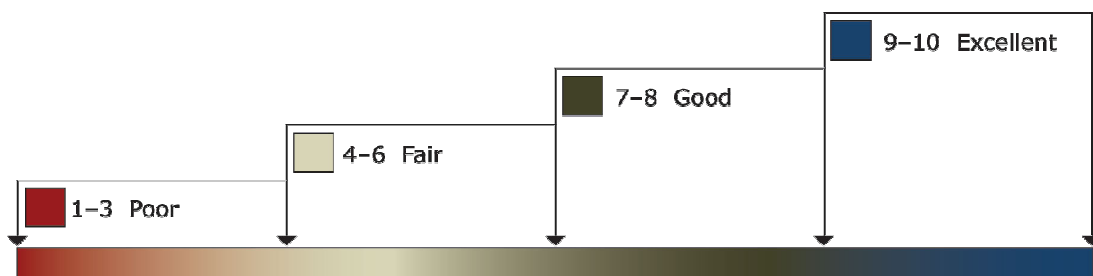
For the Technology Innovation Award, the following criteria were used to benchmark Advanced Medical Diagnostics, SA's performance against key competitors:

- Uniqueness of Technology
- Impact on New Products/Applications
- Impact on Functionality
- Impact on Customer Value
- Relevance of Innovation to Industry

Decision Support Matrix and Measurement Criteria

To support its evaluation of best practices across multiple business performance categories, Frost & Sullivan employs a customized Decision Support Matrix (DSM). The DSM is an analytical tool that compares companies' performance relative to each other with an integration of quantitative and qualitative metrics. The DSM features criteria unique to each Award category and ranks importance by assigning weights to each criterion. The relative weighting reflects current market conditions and illustrates the associated importance of each criterion according to Frost & Sullivan. Fundamentally, each DSM is distinct for each market and Award category. The DSM allows our research and consulting teams to objectively analyze each company's performance on each criterion relative to its top competitors and assign performance ratings on that basis. The DSM follows a 10-point scale that allows for nuances in performance evaluation; ratings guidelines are shown in Chart 2.

Chart 2: Performance-Based Ratings for Decision Support Matrix



This exercise encompasses all criteria, leading to a weighted average ranking of each company. Researchers can then easily identify the company with the highest ranking. As a final step, the research team confirms the veracity of the model by ensuring that small changes to the ratings for a specific criterion do not lead to a significant change in the overall relative rankings of the companies.

Chart 3: Frost & Sullivan’s 10-Step Process for Identifying Award Recipients



Best Practice Award Analysis for Advanced Medical Diagnostics, SA

The Decision Support Matrix, shown in Chart 4, illustrates the relative importance of each criterion for the Technology Innovation Award and the ratings for each company under evaluation. To remain unbiased while also protecting the interests of the other organizations reviewed, we have chosen to refer to the other key players as Competitor 1 and Competitor 2.

Chart 4: Decision Support Matrix for Technology Innovation Award

Measurement of 1–10 (1 = lowest; 10 = highest)	Award Criteria					Weighted Rating
	Uniqueness of Technology	Impact on New Products/Applications	Impact on Functionality	Impact on Customer Value	Relevance of Innovation to Industry	
Relative Weight (%)	20%	20%	20%	20%	20%	100%
Advanced Medical Diagnostics, SA	9	9	9	9	9	9
Competitor 1	4	5	5	5	5	4.8
Competitor 2	4	4	4	4	4	4

Criterion 1: Uniqueness of Technology

In comparison to competing technologies, HistoScanning™ addresses the clinical requirement for tissue characterization. It is the first commercially available application in the management of prostate cancer patients. Prostate HistoScanning is an innovative ultrasound based application that utilizes advanced tissue characterization algorithms to visualize the position and extent of tissue suspected of being malignant in the prostate gland. In this respect its design is quite unique and superior to other ultrasound based technologies. Competing ultrasound technologies are based on presenting the user with circumstantial evidence for abnormality, which is correlated with malignancy, for example, a hyper or hypo echoic lesion on the grey scale image, measuring blood flow or measuring tissue stiffness (elastography). In this respect, HistoScanning™'s sensitivity and specificity is far superior to these techniques.

Over the last ten years there has been a lot of research into the use of Magnetic Resonance Imaging (MRI) for cancer detection. In comparison with MRI, cancer detection by HistoScanning seems very promising. In addition to the benefits of accessibility and usability, clinical studies have shown that Prostate HistoScanning™, compared to histopathology as the reference test, detects cancer lesions • 0.20 cc with sensitivity of 93%. Dynamic contrast enhanced MRI again with histopathology as the reference test, has a 77% sensitivity for detection of foci greater than 0.2 cc and multi-parametric MRI (mp-MRI) a sensitivity of 80%. Prostate HistoScanning™ offers the simplicity of ultrasound and results that are comparable to MRI in a format that can be made available to all patients in the physician's office.

As an ultrasound based tissue characterization technology, HistoScanning™ is accessible to the clinician in his office, as part of the routine workflow and for a wide range of applications.

Criterion 2: Impact on New Products/Applications

In prostate cancer the ability to visualise and locate suspicious tissue means that over diagnosis can be avoided and when needed biopsies can be planned and targeted. Currently all patients presenting an elevated PSA have biopsies taken according to a standard pattern in an effort to sample the prostate in a statistically meaningful way. In patients with symptoms and previous negative biopsies some form of saturation biopsy technique may be used to ensure that more of the gland is sampled. In comparison to competing products, the adoption of Prostate HistoScanning™ is expected to lead to a significant change in biopsy practice with urologists being able to select patients for biopsy and to direct biopsies to those areas of the gland that are likely to contain the malignant tissue.

In breast cancer and other solid tumors, HistoScanning™ will allow radiologists to distinguish more accurately between cancerous and benign tissue with the result that fewer patients will have an equivocal scanning result, which are invasive diagnostic procedures. In all cancers, knowing the extent and location of the tumour prior to surgery makes excision of the tumour and achieving a negative margin more likely with fewer patients requiring a second surgical procedure and/or post surgery radiotherapy. For all cancer patients, being able to follow up the effectiveness of treatment in a non invasive way opens up the possibility of a better quality of life and better treatment outcome. This technology is serving an unmet need in the management of cancer patients and therefore has the potential to significantly change the current clinical pathway and reduce overall costs.

Criterion 3: Impact on Functionality

Based on collected data since the introduction of the HistoScanning technology, more than 7000 patients having undergone Prostate HistoScanning™ in Europe Union (EU). In comparison with competing technologies, the key benefits of HistoScanning™ are to support clinicians with treatment selection, treatment planning, post treatment follow up and triage patients for active surveillance. The technology is accessible and usable within the standard workflow in the clinic, with no requirement to refer the patient to another department or centre for further investigation.

Criterion 4: Impact on Customer Value

In comparison to competitor products, the lead application of Prostate HistoScanning™ gives urologists a new tool so that the options available to patients can be extended. Whereas prior to HistoScanning™ a patient on active surveillance had no way of knowing whether his tumour was growing, Prostate HistoScanning™ provides a way to monitor the tumour in the prostate in a non invasive way so that patients are fully supported. For surgeons planning a nerve sparing radical prostatectomy procedure, Prostate HistoScanning™ can show prior to surgery whether such a procedure is likely to be successful so that the options can be fully explored with the patient.

All of the HistoScanning™ applications allow tissue to be properly characterised providing valuable information for patient management at a number of different steps in the clinical pathway.

Criterion 5: Relevance of Innovation to Industry

In comparison to competing technologies, HistoScanning™ has the potential to save health service costs across all its applications. A more rapid diagnosis can save both the morbidity and costs associated with a series of repeat biopsies. Data collected on Prostate HistoScanning™ indicate that the use of Prostate HistoScanning™ can reduce the number of prostate biopsies by 30% with benefits to the patient and cost savings to the health system. For surgical procedures, data collected has shown that the very modest investment in Prostate HistoScanning™ can lead to significant cost savings in terms of the need for patients to undergo expensive salvage therapy. The company anticipates that in the other HistoScanning™ applications the ability to provide a quick and accurate diagnosis alongside the ability to provide more accurate surgical excision will bring significant benefits to the patient as well as achieving considerable cost savings.

Ultrasound has been used for diagnostic procedures since the 1970s. Coupling ultrasound with HistoScanning™ capability can be thought of as adding a microscope to what can be seen with the naked eye. Introducing the new modality of tissue characterisation to the clinical environment is capable of opening up a wide range of opportunities. Currently there are 36 HistoScanning centres across Europe, with the highest concentration being in Germany and Austria. The company is planning to extend commercial placements outside Europe to Russia and India. AMD is planning to introduce HistoScanning to the USA through an investigator led clinical evaluation programme.

Conclusion

Advanced Medical Diagnostics SA (AMD) headquartered in Belgium, is actively engaged in the development and commercialization of a new technology called HistoScanning™. HistoScanning™ is based on the implementation of innovative tissue characterisation algorithms. Prostate HistoScanning™ is a novel ultrasound based application that utilizes advanced tissue characterization algorithms to visualize the position and extent of tissue suspected of being malignant in the prostate gland. As an ultrasound based tissue characterization technology, HistoScanning™ is accessible to the clinician in his office, as part of the routine workflow and for a wide range of applications. It is because of all these criteria that Advanced Medical Diagnostics SA has been nominated for the 2011 Technology Innovation Award in Europe region.

The CEO 360 Degree Perspective™ - Visionary Platform for Growth Strategies

The CEO 360 Degree Perspective™ model provides a clear illustration of the complex business universe in which CEOs and their management teams live today. It represents the foundation of Frost & Sullivan's global research organization and provides the basis on which companies can gain a visionary and strategic understanding of the market. The CEO 360 Degree Perspective™ is also a “must-have” requirement for the identification and analysis of best-practice performance by industry leaders.

The CEO 360 Degree Perspective™ model enables our clients to gain a comprehensive, action-oriented understanding of market evolution and its implications for their companies' growth strategies. As illustrated in Chart 5 below, the following six-step process outlines how our researchers and consultants embed the CEO 360 Degree Perspective™ into their analyses and recommendations.

Chart 5: How the CEO's 360 Degree Perspective™ Model Directs Our Research



Critical Importance of TEAM Research

Frost & Sullivan's TEAM Research methodology represents the analytical rigor of our research process. It offers a 360 degree view of industry challenges, trends, and issues by integrating all seven of Frost & Sullivan's research methodologies. Our experience has shown over the years that companies too often make important growth decisions based on a narrow understanding of their environment, leading to errors of both omission and commission. Frost & Sullivan contends that successful growth strategies are founded on a thorough understanding of market, technical, economic, financial, customer, best practices, and demographic analyses. In that vein, the letters T, E, A and M reflect our core technical, economic, applied (financial and best practices) and market analyses. The integration of these research disciplines into the TEAM Research methodology provides an evaluation platform for benchmarking industry players and for creating high-potential growth strategies for our clients.

Chart 6: Benchmarking Performance with TEAM Research



About Advanced Medical Diagnostics SA

Advanced Medical Diagnostics SA develops and commercializes computer-aided solutions that are used to improve the diagnostic interpretation of ultrasound scans. The company offers a solution HistoScanning™, a tissue characterization technology for prostate cancer that is used to differentiate, characterize, and visualize solid organ tissue types based on the analysis of backscattered ultrasound. Its technology works in conjunction with transrectal ultrasound procedures and 3D ultrasound machines, and extracts new information from ultrasound radio frequency data. Advanced Medical Diagnostics SA was founded in 2003 and is based in Waterloo, Belgium.



About Frost & Sullivan

Frost & Sullivan, the Growth Partnership Company, enables clients to accelerate growth and achieve best-in-class positions in growth, innovation and leadership. The company's Growth Partnership Service provides the CEO and the CEO's Growth Team with disciplined research and best-practice models to drive the generation, evaluation, and implementation of powerful growth strategies. Frost & Sullivan leverages 50 years of experience in partnering with Global 1000 companies, emerging businesses and the investment community from more than 40 offices on six continents. To join our Growth Partnership, please visit <http://www.frost.com>.

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