MEDIAN Technologies and Oracle
A comprehensive portfolio of clinical applications for oncological lesion management
In the provision of cancer care, the ability to measure the success of different therapies is critical. MEDIAN Technologies has developed a suite of clinical applications, MEDIAN LMS, which allows clinicians to manage, analyse and compare CT images of cancerous lesions in order to track the impact of cancer treatments over time.

The applications in MEDIAN LMS provide sophisticated analysis and reporting capabilities that allow oncologists to measure cancerous lesions in three dimensions, track their behaviour throughout a course of treatment, produce quantitative reports and make informed clinical decisions.

Integration with PACS and RIS

MEDIAN LMS is a modular suite comprising a set of dedicated quantification, detection and reporting tools: LMS-Track, LMS-Lung, LMS-Lung/CAD, LMS-Liver and LMS-RECIST. It is designed to integrate seamlessly with modern Picture Archiving and Communication Solutions (PACS) and Radiology Information Systems (RIS). This integration allows radiologists and oncologists to launch the LMS applications directly from within those systems, enabling them to conduct immediate analyses of new CT images and compare them with previous CT scans from the same patient.

Automatic Generation of RECIST-Compliant Reports

MEDIAN LMS generates automatic reports that conform with the international RECIST standard for measuring the progress of tumours and their response to therapy. These reports can be used both as a basis for deciding future courses of treatment as well as for objectively assessing the efficacy of new drugs during clinical trials.

A Central Repository of Lesion Information

All the applications in the MEDIAN LMS suite share a central repository of current and historical data gathered using the applications. This central repository is a key feature of the MEDIAN LMS solution and delivers many benefits, including:

- Browser-based access to lesion information from any workstation connected to the network.
- Ability to mine data from multiple angles: by patient, by age group, by type of treatment, etc.
- On-site and remote access to CT images and associated information during patient follow-up

The Benefit of Quantitative Analysis

MEDIAN LMS brings the benefit of quantitative analysis to lesion management. For the first time, clinicians can definitively track the progress of individual lesions by accurately measuring changes in their size and density over time. New features recently added to MEDIAN LMS include the ability to contour lesions for the measurement of diameter - a key requirement when producing RECIST-compliant reports - and volume.

“Several conditions are necessary to build a cancer support network: the first consists of a good IT architecture connecting all hospitals. The second is the constitution of a quality process supported by efficient applications allowing quick and accurate lesion identification, measurements and follow-up. The last condition represents the existence of a secured database centralising all results. MEDIAN LMS meets the last two requirements.”

- Dr P. Stügner, Landeskrankenhaus, Innsbruck, Austria

“Oncology imaging reporting today relies on qualitative instead of quantitative assessment of response to therapy. MEDIAN LMS offers ways to standardise this reporting across cancer care networks for all patients thanks to their unique integration features.”

- Fredrik Brag, CEO, MEDIAN Technologies

MEDIAN LMS: Key Benefits

MEDIAN LMS delivers many benefits to radiologists and oncologists seeking to improve the provision of cancer care in individual hospitals or across a cancer care network. Benefits include the ability to:

- Detect new lesions by analysing CT scans
- Conduct computer-aided measurement of the size and density of individual lesions
- Objectively analyse the behaviour of individual lesions over time in response to cancer therapies
- Automatically generate RECIST-compliant reports on responses to therapy
- Assess the efficacy of new cancer drugs during clinical trials
- Provide a centralised source of lesion information across multiple sites and departments
- Drive incremental improvements in cancer care provision

Oracle and MEDIAN Technologies: Two Healthcare Technology Leaders

The centralised data repository at the heart of MEDIAN LMS is based on a powerful Oracle relational database management system. Oracle has always been the database of choice for MEDIAN Technologies, due to its ability to store data in a structured way to facilitate detailed analysis, reporting and data mining. These capabilities are essential to MEDIAN LMS’s ability to generate accurate, quantitative reports for use in patient care, clinical trials management and regulatory submissions.

Oracle’s experience and expertise in the Healthcare sector was another factor informing MEDIAN Technologies’ decision to base its LMS suite on Oracle Database. Hundreds of healthcare organisations worldwide rely on Oracle software every day, including the top 14 of the Fortune Global 500 healthcare organisations. Oracle is continually expanding its product offerings and services for application developers and end-user organisations operating in the healthcare domain.

“All hospitals in our group have a radiology department, but only one has a medical oncology department. About 25% of cancer patients must move to this hospital to be treated. Thanks to MEDIAN LMS’s centralised data management system, all the lesion information obtained during the initial evaluation and staging is available for follow-up.”

- Dr. Philippe Peeters, IRIS South Hospitals, Brussels, Belgium

“Oracle has always been a good partner to us. Not only does it host ultra-reliable products, but it also gives us access to experts to help us optimise our use of Oracle technology. Oracle is the world leader in database technology and also has expert knowledge in the issues currently facing the healthcare industry, making it the ideal partner for specialist application developers like MEDIAN Technologies.”

- Michael Auffret, VP Product Management, MEDIAN Technologies
About MEDIAN Technologies
Based in Sophia-Antipolis (France), MEDIAN Technologies designs, manufactures and sells LMS – Lesion Management Solutions – a portfolio of clinical applications for quantitative management of response to therapy in oncology imaging. The portfolio includes LMS-Track, LMS-Lung, LMS-Lung/CAD, LMS-Liver and LMS-RECIST. LMS applications are used in clinical routine and clinical trials to objectively measure and track cancerous or suspicious lesions diagnosed in CT scans, distribute a standardized oncologic report and centralize the information for multidisciplinary review. For more information about MEDIAN Technologies, please visit www.mediantechnologies.com

About Oracle
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