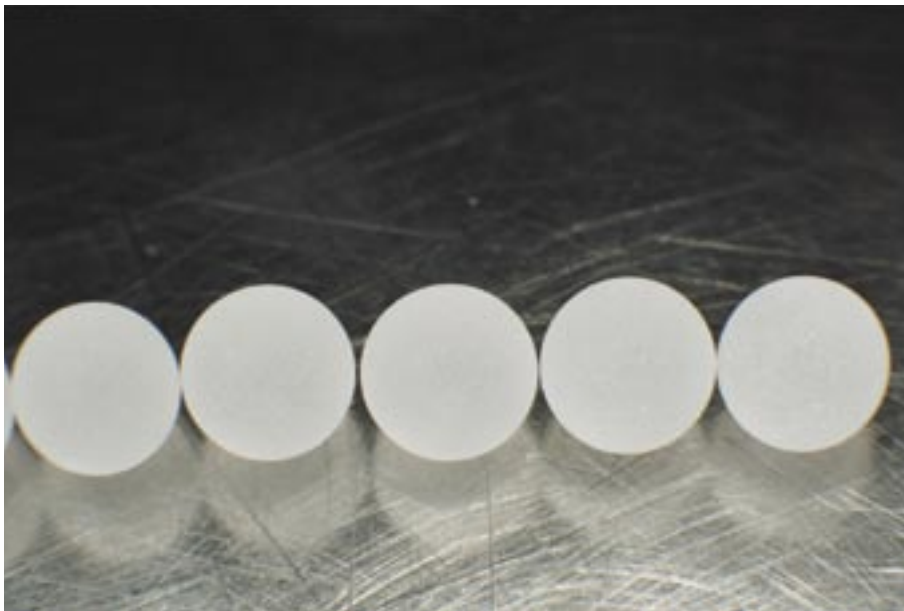


# Prediction of an elusive disease



MonoTotal™, the new tumor marker for efficient management of non-small cell lung cancer (NSCLC). The tumor cell activity marker MonoTotal™ provides the physician with valuable information of the disease course.

## MonoTotal™ for efficient management of lung cancer patients

The new activity tumor marker MonoTotal™ is an efficient tool in the management of non-small cell lung cancer patients (NSCLC). MonoTotal™ can provide the physician with a reliable aid in establishing prognosis, in treatment monitoring and in patient follow-up. By using MonoTotal™, the physician can get an indication of the course of the disease, measured in terms of tumor cell

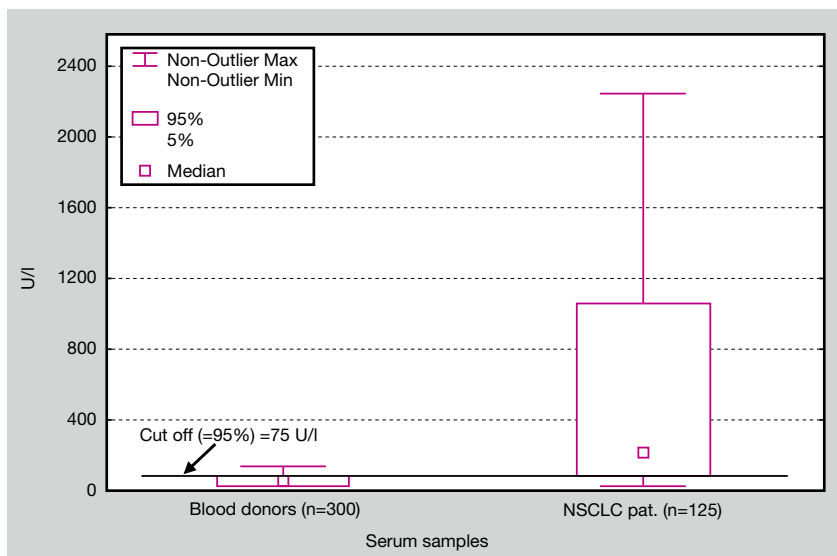
activity instead of the more conventional tumor burden measurements. The possibility to add the valuable information that quantitative serum determinations by MonoTotal™ gives to the overall clinical picture, supports both an earlier evaluation of treatment efficiency and a more accurate prediction of clinical outcome.

## Detects changes in tumor cell activity with MonoTotal™

MonoTotal™ is a quantitative test, specifically designed for the analysis of serum samples. By following the patient with repeated and regular MonoTotal™ measurements, the physician can obtain critical information about tumor cell activity. A changed MonoTotal™ level indicates changes in tumor cell activity, with elevated levels pointing to the presence of a tumor. This information is considered particularly important during patient treatment and follow-up, where a

simple blood sample thus in a reliable way can contribute to the monitoring of therapy and early detection of tumor recurrence. Since only approximately 15 percent of the lung cancer patients are diagnosed when the disease is still restricted to the lungs, early detection is critical to increase the chances of survival. Here, MonoTotal™ may represent a valuable tool in the cancer patient management.

## MonoTotal™ in non-small cell lung cancer patient management



Swedish blood donors vs. non-small cell lung cancer (NSCLC) patients analyzed with MonoTotal™. At 95% specificity, the activity tumor marker MonoTotal™ showed a sensitivity of 87% at a cut off level of 75 U/l.

## MonoTotal™ -An activity tumor marker

The MonoTotal™ test is a monoclonal assay that measures the reactivity against defined epitopes on cytokeratins 8, 18 and 19. The cytokeratins (intermediate filament proteins) are epithelial cell-specific. During the transformation of normal cells into malignant cells, the cytokeratin expression patterns are usually maintained. Cytokeratins are present in the circulation as

partially degraded single protein fragments, forming soluble protein complexes of different sizes.

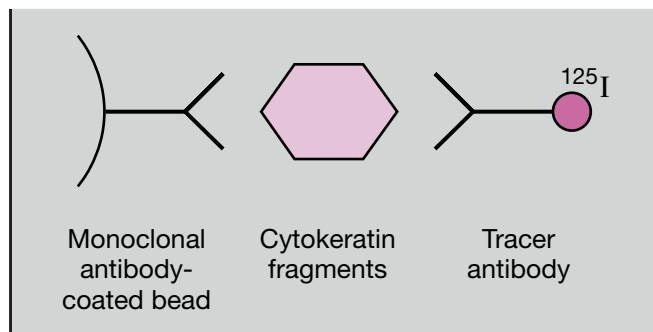
Elevated serum levels of cytokeratin proteins have been reported in patients with epithelial cell carcinomas. Cytokeratin 19 has been found at elevated levels in patients suffering from lung carcinoma.

## MonoTotal™ Technical Data

The MonoTotal™ assay is available in IRMA technology (ELISA technology under construction). The specificity of the reagents were analyzed by immunohistochemistry, gel electrophoresis and

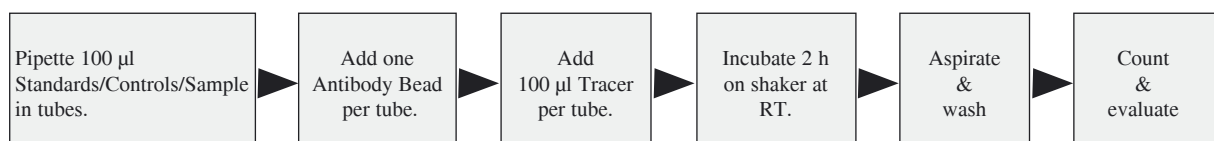
immunoblotting. The monoclonal MonoTotal™ assay shows no detectable cross reactivity to other tumor-associated antigens that may be present in the patients.

## MonoTotal™ Technology



The MonoTotal™ is a two-site antibody immunoradiometric (sandwich) assay.

## MonoTotal™ Methodology



IRMA Assay procedure - Soluble fragments of cytokeratins 8, 18 and 19 are reacted with a bead coated with monoclonal antibodies simultaneously with radiolabeled antibodies.

# MonoTotal™

## A tumor marker for Total Care Management

MonoTotal™ is a new tumor marker that measures tumor cell activity instead of tumor burden.

MonoTotal™ forms an efficient aid in the management of patients with non-small cell lung cancer (NSCLC).

MonoTotal™ provides the physician with valuable information of the disease course.

MonoTotal™ gives a reliable indication of patient prognosis.

MonoTotal™ serves as a tool for prediction of treatment outcome.

MonoTotal™ provides the physician with early signals on tumor recurrence during patient follow-up.

MonoTotal™ supports therapeutical decisions to optimize patient management and improve the cost/benefit ratio.

MonoTotal™ is a monoclonal immunoassay with reactivity against defined epitope structures on cytokeratins 8, 18 and 19.

