TPS®

For management of Breast, Prostate and Ovarian cancer

Provides knowledge to decision.
The tumor marker TPS® is a reliable indicator of tumor cell activity particularly useful in patient management for different carcinomas. Compared with conventional tumor mass markers, the activity marker TPS® provides the clinician with earlier signals about the course of the disease. TPS® is particularly useful in treatment monitoring and surveillance of patients with epithelial cell carcinomas e.g. breast, prostate and ovarian cancer.

**Cytokeratins**

Most eukaryotic cells have cytoplasmic cytoskeletal structures known as intermediate filaments. The cytoskeletal network is responsible for the mechanical integrity of the cell and it is critical during cellular processes like cell division, motility and cell to cell contacts. At present more than 20 different cytokeratins have been identified, of which cytokeratin 8, 18 and 19 are the most abundant in simple epithelial cells. The cytokeratins are epithelial cell specific and the cytokeratin pattern is usually preserved during the transformation of normal cells into malignant cells.

**Tissue Polypeptide Specific Antigen (TPS®)**

TPS® is a quantitative immunoassay that specifically measures a defined epitope on cytokeratin 18. The test result is directly proportional to the concentration of soluble cytokeratin fragments in serum and plasma. An elevated level of soluble cytokeratin fragments in patient samples is an indication of epithelial tumor cell activity. By following the patient with repeated assays of TPS®, both during treatment and at follow up, the clinician obtain critical information about the tumor activity during surveillance for early detection of recurrence.

**TPS® - A TUMOR MARKER FOR PATIENT MANAGEMENT**

1. Particularly useful in patient management for carcinomas of different origins
2. Provides the clinician with earlier signals about the course of the disease when compared to clinical criteria
3. In combination with conventional tumor mass markers gives a more complete clinical picture, thus making it possible for the clinician to act with greater insight
TPS® in cancer patient management – clinical utility

Performance characteristics are well defined for patients with epithelial cell carcinomas e.g. breast, prostate and ovarian cancer.

Breast cancer

TPS® has consistently been found to be a good marker for prediction of prognosis and response to therapy. By serial testing, TPS® can be used for therapy control and follow-up of breast cancer patients. The sensitivity of TPS® to detect progressive disease is particularly high in patients with metastatic spread. Pretreatment TPS® levels have been shown to be related to prognosis and clinical outcome.

Prostate cancer

The cytokeratin marker TPS® can provide the clinician with an important complementary tool to PSA, especially in patients following androgen-suppressive hormonal therapy. TPS® has been shown to clearly differentiate between stable and progressive disease and may consequently be used as an early indicator of the efficiency of treatment.

Ovarian cancer

TPS® can be used as a prognostic indicator of clinical outcome in patients with advanced ovarian cancer. Due to its high sensitivity for progressive disease, the activity marker TPS® also provides useful supplementary information to other markers. Clinical reports show an increase in prognosis efficiency using the combination of CA125 and TPS® for patient monitoring. The addition of TPS® improves the clinical decision-making and overall patient management for ovarian cancer.

“Compared with conventional tumor mass markers, the activity marker TPS® provides the clinician with earlier signals about the course of the disease.”

Marie Torstensson
Product Manager, IDL Biotech AB

4. Serves as a tool for the prediction of treatment outcome
5. High sensitivity for metastatic disease
6. Supports therapeutical decisions to optimize patient management and improve the cost/benefit
7. Reliable indicator of tumor cell activity, especially useful in treatment monitoring and patient follow-up.
TPS® – For management of Breast, Prostate and Ovarian cancer

FAST FACTS TPS®

- Specifically measures cytokeratin 18
- Clinically proven utility for cancer management
- Available in ELISA and IRMA formats
- Well-documented for clinical use in patients with breast, prostate and ovarian cancer

References:

**TPS® general**

**TPS® in breast**

**TPS® in prostate**

**TPS® in ovarian**

Provides knowledge to decision.

**Oncology**
TPS®, UBC®, TPACyK®, MonoTotal®, TUBEX® TF

**Bacteriology**