Personalised medicine brings the right medicine to the right patient at the right time. Biomarkers are an important element of personalised medicine, as they help to identify the patients that are likely to respond to a medicine and avoiding unnecessary treatment for those unlikely to respond.

**HOW BIOMARKERS HELP GUIDE PATIENTS TO THE RIGHT MEDICINE**

**What are biomarkers?**

They are indicators that provide information about normal biological processes, disease processes or pharmacological responses to a therapeutic intervention.

Examples of biomarkers include everything from pulse and blood pressure through basic chemistries to more complex laboratory tests of blood and other tissues.

**Health literate patients are being able to:**

- understand how biomarkers are used
- comprehend the result of a biomarker test
- make informed decisions jointly with their physician

**Definition:**

Health literacy refers to the capacity to make sound health decisions in the context of everyday life

**How biomarkers are used in cancer treatment**

1. **STEP 1: CANCER DIAGNOSIS**
   - Initial assessment of the malignancy of a tumour and identification of the type of cancer.

2. **STEP 2: BIOMARKER ANALYSIS**
   - Secondary diagnosis via biomarker, can provide information about the best treatment for that patient.
   - **Lung cancer (example)**
     - 2 main types – non-small cell and small cell
     - Several biomarkers found in lung cancer, e.g.: ALK, EGFR, KRAS, PD-L1

3. **STEP 3: TREATMENT DECISION**
   - Patient and physician can discuss test results to make the right treatment decision.

**CANCER LITERACY: PAVING THE WAY FOR PERSONALISED TREATMENT**

With health literacy, the promise of personalised medicines can be fulfilled by bringing together:

- Patient
- Physician

... choosing the right therapy option to help with the fight against cancer

For more information visit: [http://www.immuno-oncology.msd.eu](http://www.immuno-oncology.msd.eu)

**References:**