

What is proteomics?

Proteomics is the large scale study of proteins. Genomes are static - the genes we are born with are the genes we die with, but the protein make-up in our bodies differs from cell to cell and changes considerably over time.

Technology Snapshot

PromarkerD – commercialising a diagnostic test

PILL is strategically placed at the centre of a revolution in medicine. The company's technology is directed at resolving the medical challenges societies face around the world with a way of diagnosing diseases earlier and more accurately.

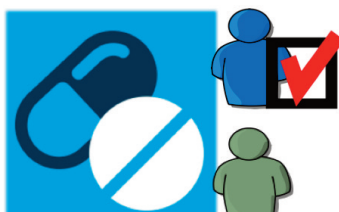
Proteomics offers a precise diagnosis because it looks directly at the proteins of the disease. The complexity of the protein "picture" is identified for each test done on a patient's blood sample, and the detection of only small amounts of these proteins is required to determine the patient's health. In the past year the company has brought its diagnostic test for diabetic kidney disease (DKD) to the commercialisation phase. This test (PromarkerD) is in the process of adaptation to take its place in clinical pathology practice. This method of diagnosing a particular disease could eventually supersede many of the less accurate and unreliable methods currently used. PromarkerD is built on a universally adaptable platform. The process of generating the biomarkers is the same for any disease, whether it be a cancer such as mesothelioma or prostate. The detection can be made early and accurately.

Progressing from a patented biomarker to clinical practice can be achieved by two established routes. The end user in both cases is the pathology laboratory that processes blood samples taken from the patient. In the first case it will be a large laboratory that will have specialist equipment (mass spectrometers) similar to PILL, and the process is developed by such a laboratory under licence. Known as a **laboratory developed test (LDT)**, the licensing laboratory will seek accreditation of the test.

In the second approach, a set of antibodies to the biomarker panel are developed. These are then used in an enzyme linked assay (ELISA), a technology which is well established and widely used around the world. This **in vitro diagnostic test (IVD)** can be used in parallel with the LDT.



IVD



CDx



LDT

PromarkerD