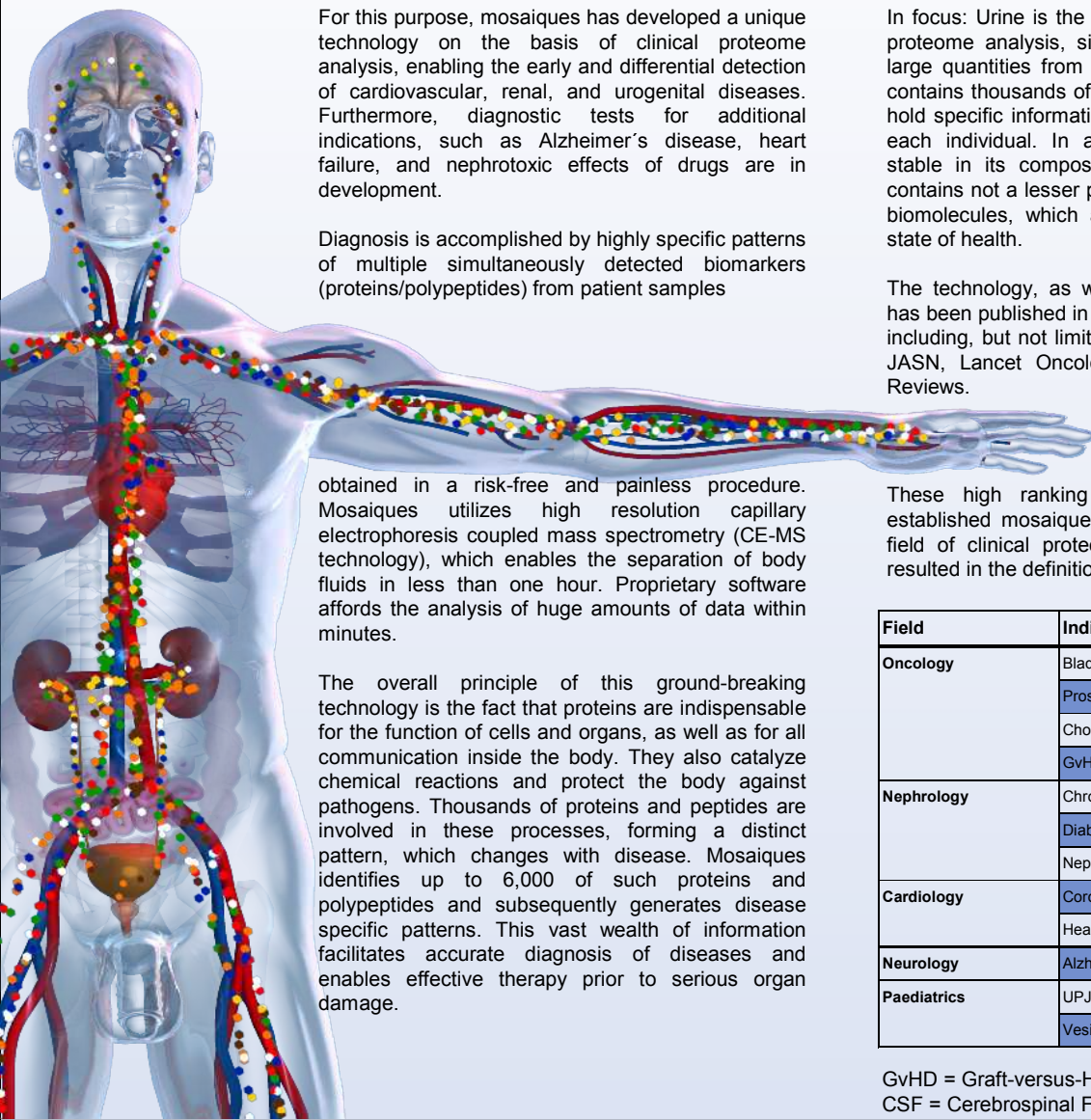


mosaiques diagnostics GmbH

The mosaiques diagnostics GmbH was established in 2002 in Hannover, Germany. The company's core competence is the early and reliable detection of diseases enabling personalized medicine during therapy and drug development. The company utilizes **diagnostic polypeptide patterns** (DiaPat) derived from the fast and accurate analysis of proteins and polypeptides in body fluids (e.g. urine and cerebrospinal fluid).



For this purpose, mosaiques has developed a unique technology on the basis of clinical proteome analysis, enabling the early and differential detection of cardiovascular, renal, and urogenital diseases. Furthermore, diagnostic tests for additional indications, such as Alzheimer's disease, heart failure, and nephrotoxic effects of drugs are in development.

Diagnosis is accomplished by highly specific patterns of multiple simultaneously detected biomarkers (proteins/polypeptides) from patient samples

obtained in a risk-free and painless procedure. Mosaiques utilizes high resolution capillary electrophoresis coupled mass spectrometry (CE-MS technology), which enables the separation of body fluids in less than one hour. Proprietary software affords the analysis of huge amounts of data within minutes.

The overall principle of this ground-breaking technology is the fact that proteins are indispensable for the function of cells and organs, as well as for all communication inside the body. They also catalyze chemical reactions and protect the body against pathogens. Thousands of proteins and peptides are involved in these processes, forming a distinct pattern, which changes with disease. Mosaiques identifies up to 6,000 of such proteins and polypeptides and subsequently generates disease specific patterns. This vast wealth of information facilitates accurate diagnosis of diseases and enables effective therapy prior to serious organ damage.

In focus: Urine is the specimen of choice for clinical proteome analysis, since urine can be obtained in large quantities from a non-invasive procedure and contains thousands of proteins and polypeptides that hold specific information on the (patho)physiology of each individual. In addition, urine is much more stable in its composition compared to blood, but contains not a lesser prominent variety of informative biomolecules, which are indicative of the patient's state of health.

The technology, as well as the clinical application, has been published in over 130 high ranking journals, including, but not limited to: Nature Medicine, Blood, JASN, Lancet Oncology, and Mass Spectrometry Reviews.

These high ranking scientific publications have established mosaiques as the leading player in the field of clinical proteome analysis, and have also resulted in the definition of standard practices within

the clinical proteomics field and the construction of a unique academic framework of world-wide collaborations with over 60 Universities (e.g. Harvard, UVA, NIH, FDA, INSERM, University of Glasgow, Steno Diabetes Center, etc.). Mosaiques also performs clinical trials in cooperation with the pharmaceutical industry, enabling improvement of therapy and therapeutics, based on an individual's molecular polypeptide signature.

Diagnosis of bladder and prostate cancer, chronic renal diseases, diabetic nephropathy, Graft-versus-Host Disease, ureteropelvic junction obstruction in newborn, and infarct risk is already marketed in Europe through the subsidiary DiaPat GmbH. The combination of the above mentioned indications enables the comprehensive and non-invasive examination of the patient's state of health via the DiaPat-Health-Checkup system.

Mosaiques' polypeptide pattern technology has been proven in multiple blinded clinical studies on over 20,000 qualified patient samples from different pathological alterations:

Field	Indication/Disease	Sample	Sensitivity	Specificity	Status
Oncology	Bladder Cancer staging	Urine	92%	68%	in the market
	Prostate Cancer	Urine	90%	60%	in the market
	Cholangiocarcinoma	Urine + Bile	77%	80%	in the market
	GvHD after allo-HSCT	Urine	83%	76%	in the market
Nephrology	Chronic nephropathies	Urine	>90%	>90%	in the market
	Diabetic nephropathy	Urine	>95%	>95%	in the market
	Nephrotoxicity	Urine	-	-	in development
Cardiology	Coronary artery disease	Urine	79%	88%	in the market
	Heart failure	Urine	-	-	in development
Neurology	Alzheimer's disease	CSF	87%	79%	in development
Paediatrics	UPJ obstruction in neonates	Urine	>95%	>95%	in the market
	Vesicoureteral reflux	Urine	95%	60%	in development

GvHD = Graft-versus-Host Disease
CSF = Cerebrospinal Fluid

allo-HSCT = allogeneic Hematopoietic Stem Cell Transplantation
UPJ = Ureteropelvic Junction