

## FRAUNHOFER INSTITUTE FOR CELL THERAPY AND IMMUNOLOGY, BRANCH BIOANALYTICS AND BIOPROCESSES IZI-BB



- 1 Bead-based Assay
- 2 Smartphone based lateral flow test strip readout

## Fraunhofer Institute for Cell Therapy and Immunology, Branch Bioanalytics and Bioprocesses IZI-BB

Am Mühlenberg 13 14476 Potsdam Germany

Dr. Eva Ehrentreich-Förster Phone +49 331 58187-203 eva.ehrentreich@izi-bb.fraunhofer.de

www.izi-bb.fraunhofer.de

## SMARTPHONE BASED DIAGNOSITCS

When unexpected health events suddenly affect our lives can restrict the speed of the information can be very valuable. If a suspicion of a disease is confirmed or refuted at an early stage, a quick and targeted reaction is also possible. An optical control, which is read out via a smartphone, can help with initial information.

Measuring dip stick lateral flow tests the presence of biomarkers / analytes within a few minutes, e.g. in the pregnancy test. Combined with quantification via a smartphone, the concentration of the analyte in serum/ blood can be determined within a few minutes. Areas of application e.g. patient monitoring after surgery and other point-of care of-Need analyses, which allow the patient to monitor himself and thus lead to an improved quality of life.

