Deutsche Akkreditierungsstelle GmbH

Annex to the Accreditation Certificate D-ML-13440-03-00 according to DIN EN ISO 15189:2014

Valid from: 11.10.2021
Date of issue: 11.10.2021

Holder of the certificate

Labor Berlin-Charité Vivantes GmbH

Department of Human Genetics (NGS & Molekular Genetics), Sylter Straße 2, 13353 Berlin
Department of Tumour Cytogenetics, Augustenburger Platz 1, Südring 11, 13353 Berlin
Department of Immunology, Sylter Straße 2, 13353 Berlin
Department of Allergy Diagnostics, Sylter Straße 2, 13353 Berlin
Department of Autoimmune Diagnostics, Sylter Straße 2, 13353 Berlin
Department of Haematology/Oncology, Campus Virchow-Klinikum (CVK) Sylter Straße 2,
Campus Benjamin Franklin (CBF), Hindenburgdamm 30, 12203 Berlin
and Charité Campus Mitte (CCM) Charitéplatz 1, 10117 Berlin
Department of Virology Sylter Straße 2, 13353 Berlin and
Campus Virchow-Klinikum, Augustenburger Platz 1, 13353 Berlin
Department of Laboratory Medicine & Toxicology, Sylter Straße 2, 13353 Berlin
Campus Benjamin Franklin (CBF), Hindenburgdamm 30, 12200 Berlin
Campus Virchow-Klinikum (CVK), Sylter Straße 2, 13353 Berlin
Campus Charité Mitte (CCM), Chariteplatz 1, 10117 Berlin
Department of Laboratory Medicine & Toxicology, Central Laboratory Neukölln,
Rudower Straße 48, 12351 Berlin
Department of Endocrinology & Metabolism, Sylter Straße 2, 13353 Berlin
Department of Mikrobiology & Hygiene, Sylter Straße 2, 13353 Berlin, Augustenburger Platz 1, 13353 Berlin

Within the given type of examination marked with *), the medical laboratory is permitted, without being required to inform and obtain prior approval from DAkkS, the free choice of standards or equivalent examination procedures.Within the given type of examination marked with **), the medical laboratory is permitted, without being required to inform and obtain prior approval from DAkkS, the modification, development and refinement of examination procedures.The listed test methods are exemplary.The medical laboratory maintains a current list of all test methods in a flexible scope of accreditation.

The management system requirements of DIN EN ISO/IEC 15189 are written in the language relevant to the operations of medical laboratories. Laboratories that conform to the requirements of this standard, operate generally in accordance with the principles of DIN EN ISO 9001.
The certificate together with the annex reflects the status as indicated by the date of issue.
The current status of any given scope of accreditation can be found in the directory of accredited bodies maintained by Deutsche Akkreditierungsstelle GmbH at https://www.dakks.de/en/accredited-bodies-search.html
This document is a translation. The definitive version is the original German annex to the accreditation certificate.

Examinations in the field:

Medical Laboratory Diagnostics

Medical laboratory fields:
Clinical Chemistry
Immunology
Human Genetics (Molecular Humangenetics, Cytogenetics)
Mikrobiology
Virology
Transfusion medicine

Department of NGS & Molecular Genetics

Location: Sylter Straße 2, 13353 Berlin

Test area: Human genetics (human molecular genetics)

Type of test:

Molecular biological analysis (amplification methods)**

Analyte (measurand)	Test material (matrix)	Test technique
Angelman syndrome (SNRPN)	EDTA blood, DNA, amniotic fluid, chorionic villi	Methylation test
COFFIN-like Panel: ARID1A, ARID1B, SMARCA4 , SMARCB1, SMARCE1 , SOX11 , PHF6	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect) Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)
Cystic fibrosis (CFTR)	EDTA blood, DNA, amniotic fluid, chorionic villi	PCR, Sanger sequencing, quantitative PCR
Cystic fibrosis (CFTR)	EDTA blood, DNA, Guthrie card	Real-time PCR, hybridisation
Deafness, sensorineural Type 1	EDTA blood, DNA	PCR, Sanger sequencing
Deafness, sensorineural Type 1	EDTA blood, DNA	PCR, Sanger sequencing
Dysostosis panel: TP63, TBX5, SALL4, IHH, BMPR1B, GDF5, HOXD13, SHH-ZRS, TBX3, GLI3, LRP4 advanced diagnostics: ARHGAP31, B9D1, BBS1, BHLHA9, DHCR7, DLL3, DLX5, DYNC2H1, EFNB1, ESCO2, EVC, EVC2, FBXW4, FGF10, FGFR2, GDF6, HDAC8, HOXA11, HOXA13, LFNG, LMX1B, MESP2, MKS1, NIPBL, NOG, ORC1, PITX1, PTH1R, RBM8A, SALL1, SMC1A, SMC3, TBX4, TCTN2, WNT3, WNT10B	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect whole exome sequencing with bioinformatic limitation to genes to be examined) Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)

Analyte (measurand)	Test material (matrix)	Test technique
Hereditary breast/ovarian cancer panel: BRCA1/2 (+MLPA), RAD51C, CHEK2, PALB2, ATM, CDH1, BRIP1, RAP51D, TP53,BARD1	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect), MLPA analysis Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)
Hereditary breast/ovarian cancer (BRCA1)	EDTA blood, DNA	PCR, Sanger sequencing, MLPA analysis
Hereditary breast/ovarian cancer (BRCA2)	EDTA blood, DNA	PCR, Sanger sequencing MLPA analysis
Hereditary breast/ovarian cancer (CHEK2)	EDTA blood, DNA	PCR, Sanger sequencing, mutation c.1100delC
Hypercholesterolaemia panel: LDLR (+MLPA), PCSK9, APOB, LDLRAP1	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect), Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)
Intersex panel: Ar, NR5A1, WT1, SRY, SRD5A2, HSD17B3, MAP3K1, DHH, NR0B1, HSD3B2, STAR, LHCGR, MAMLD1, WWOX, POR	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect) Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)

Analyte (measurand)	Test material (matrix)	Test technique
Marfan syndrome panel: FBN1, TGFBR1. TGFBR2	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect) Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)
Noonan syndrome core genes 1: PTPN11	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect) Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)
Noonan syndrome core genes 2: SOS1, RAF1, RIT1, BRAF, KRAS,	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect) Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)

Analyte (measurand)	Test material (matrix)	Test technique
Osteopetrosis / increased bone mineral density panel: CLCN7, SOST, TCIRG1, OSTM1, SNX10, TNFSF11, TNFRSF11A, ANKH, LEMD3, FAM20C, LRP5, CTSK advanced diagnostics: ABCC9, ACP5, AMER1, BMP1, CA2, FERMT3, IKBKG, LRP4, PLEKHM1, PTDSS1, RASGRP2, SLC29A3, TGFB1	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect whole exome sequencing with bioinformatic limitation to genes to be examined) Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)
Osteoporosis / decreased bone mineral density panel: ALPL, PLS3, PLS3, WNT1 NGS, IFITM5, LRP5, COL1A1, COL1A2, CRTAP, BMP1; advanced diagnostics: CREB3L1, FBLN5, FKBP10, GORAB, LMNA, LEPRE1, PLOD1, PLOD2, PPIB, RECQL4, RUNX2, SEC24D, SERPINF1, SERPINH1, SPARC, TMEM38B, ZMPSTE24	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect whole exome sequencing with bioinformatic limitation to genes to be examined) Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)
Prader-Willi syndrome (SNRPN)	EDTA blood, DNA, amniotic fluid, chorionic villi	Methylation test

Analyte (measurand)	Test material (matrix)	Test technique
Rett, Rett-like and Angelman panel: MECP2, FOXG1, CDKL5, ARX, MEF2C, IQSEC2, KCNA2, TCF4, SLC9A6, UBE3A	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect) Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)
Skeletal dysplasias panel: COL2A1, FGFR3, COMP, COL11A1, SLC26A2, RUNX2, TRPV4,advanced diagnostics: ACAN, ANO5, ARSE, CHST3, CHSY1, COL11A2, COL9A1, COL9A2, COL9A3, EXT1, EXT2, FLNB, GNAS, H19, HPGD, IHH, IMPAD1, MMP13, MMP2, MMP9, NBAS, PAPSS2, PTHLH, PTPN11, RMRP, RNU4ATAC, ROR2, SH3BP2, SHOX, SOX9, TGDS, TRAPPC2, TRIP11, TRPS, WNT5A, WISP3	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect whole exome sequencing with bioinformatic limitation to genes to be examined) Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)
TAAD panel: FBN1 ,TGFBR1, TGFBR2 , MYH11 , MYLK, SMAD3, TGFB2, ACTA2, COL3A1	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect) Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)

Analyte (measurand)	Test material (matrix)	Test technique
Deafness, dominant panel: COL11A2, COCH, DFNA5, DIAPH1, KCNQ4, MYH14,WFS1	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect) Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)
Deafness, recessive panel: CDH23, MYO7A, PCDH15, SLC26A4	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect) Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)
Monosomy 3 typing in uveal melanoma	EDTA blood, DNA from uveal melanoma tissue	Fragment analysis
Common variable immunodeficiency diseases (CVID): BTK, CTLA4, LRBA, ICOS, NFKB1, NFKB2, PIK3CD, PIK3R1, STAT3, TNFRSF13C	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect whole exome sequencing with bioinformatic limitation to genes to be examined) Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)

Analyte (measurand)	Test material (matrix)	Test technique
CD4 lymphopenia: ADA, XCR4, DOCK8, GATA2, LCK, MAGT1, PIK3CD,PIK3R1, RAG1, RAG2, STK4, UNC119, CXCR4, DOCK8, GATA2, LCK, MAGT1, PIK3CD, PIK3R1, RAG1, RAG2, STK4, UNC119	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect whole exome sequencing with bioinformatic limitation to genes to be examined) Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)
Hyper IgE syndrome: ARCP1B, DOCK8, IL6ST, ITK, PGM3, STAT3, TYK2, WAS, WIPF1, ZNF341	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect whole exome sequencing with bioinformatic limitation to genes to be examined) Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)

Analyte (measurand)	Test material (matrix)	Test technique
Hyper IgM syndrome: AICDA, CD40, CD40LG, IKBKG, INO80, MSH6, NBN, PIK3CD, PMS2, RAG1, RAG2, UNG	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect whole exome sequencing with bioinformatic limitation to genes to be examined) Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)
Chronic mucocutaneous candidiasis: AIRE, CARD9, CLEC7A, DOCK8, IL12RB1, IL17F, IL17RA, IL17RC, RORC, STAT1, STAT3, TRAF3IP2	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect whole exome sequencing with bioinformatic limitation to genes to be examined) Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)

Analyte (measurand)	Test material (matrix)	Test technique
Autoinflammatory diseases: ADA2, COPA, IL1RN, IL36RN, MEFV, MVK, NLRC4, NLRP3, NOD2, PLCG2, TMEM173, TNFRSF1A	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect whole exome sequencing with bioinformatic limitation to genes to be examined) Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)
EBV-associated lymphoproliferative diseases: CD27, CD70, CTPS1, CORO1A, ITK, LRBA, MAGT1, MCM4, SH2D1A, STK4, WAS, XIAP, ZAP70	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect whole exome sequencing with bioinformatic limitation to genes to be examined) Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)

Analyte (measurand)	Test material (matrix)	Test technique
Neutropenia: CD40, CD40LG, CSF3R, CXCR4, ELANE, GATA1, GATA2, GFI1, G6PC3, HAX1, JAGN1, LAMTOR2, RAB27A, SBDS, SLC37A4, TAZ, USB1, VPS45, WAS	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect whole exome sequencing with bioinformatic limitation to genes to be examined) Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)
Thrombocytopenia: ACTN1, ANKRD26, ETV6, FLI1, HOXA11, MASTL, MPL, RUNX1, TUBB1, WAS	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect) Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)
Thrombocytopenia (morphologically conspicuous): GATA1, GFI1B, GP1BA, NBEAL1, NBEAL2, PRKACG, VIPAS39, VPS33B	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect) Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)

Analyte (measurand)	Test material (matrix)	Test technique
Macrothrombocytopenia: ABCG8, ACTN1, FLNA, GP1BA, GP1BB, GP9 MYH9	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect) Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)
Thrombocytopathy: ANO6, FERMT3, ITGA2B, ITGB3, NBEAL2, P2RY12 PLAU, RASGRP2	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect) Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)
Thrombocytopathy plus albinism: AP3B1, BLOC1S3, BLOC1S6, DTNBP1 HPS1, HPS3, HPS4, HPS5, HPS6	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect) Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)

Analyte (measurand)	Test material (matrix)	Test technique
Rare coagulation disorders: COL3A1, FGA, FGB, FGG, ITGA2B, P2RY12 VWF	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect) Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)
Autoimmune cytopenia: ADAMTS13, AIRE, CARD11, CASP8, CASP10, FAS, FASLG, FOXP3, SH2D1A, STAT3, XIAP, XLTWAS	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect) Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)
Calcium-phosphate metabolism disorder: CASR, CLCN5, DMP1, ENPP1, FGF23, GALNT3, PHEX, SAMD9, SLC9AR1, SLC34A1, SLC34A3 advanced diagnostics: GNAS, KL, STX16	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect whole exome sequencing with bioinformatic limitation to genes to be examined) Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)

Analyte (measurand)	Test material (matrix)	Test technique
Adrenogenital syndrome due to CYP21A2 deficiency advanced diagnostics: CYP11B1, CYp17A1,HSD3B2	EDTA blood, DNA, amniotic fluid, chorionic villi	PCR, Sanger sequencing, MLPA analysis
PCD - primary ciliary dyskinesia: CCDC103, CCDC39, DNAI1, RSPH1, SPAG1, ZMYND10, DNAH5 (Sanger Exon 45) advanced diagnostics: ARMC4, C21orf59, CCDC114, CCDC151, CCDC40, CCDC65, CCNO, CENPF, CFAP300, DNAAF1, DNAAF2, DNAAF3, DNAAF4, DNAAF5, DNAH1, DNAH11, DNAH8, DNAH9, DNAI2, DNAJB13, DNAL1, DRC1, GAS2L2, GAS8, HYDIN, LRRC56, LRRC6, MCIDAS, NME8, OFD1, PIHD3, RPGR, RSPH3, RSPH4A, RSPH9, STK36, TTC25	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect whole exome sequencing with bioinformatic limitation to genes to be examined) Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)
chILD - childhood interstitial lung disease: ABCA3, CSF2RA, CSF2RB, NKX2-1, SFTPB, SFTPC	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect) Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial) Sanger

Analyte (measurand)	Test material (matrix)	Test technique
Whole exome sequencing (WES)	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)
Connective tissue diseases / hypermobility syndromes: COL3A1, COL5A1, FBN1, TGFBR1, TGFBR2 advanced diagnostics: ALDH18A1, ATP6V0A2, EFEMP2, ELN, FBLN5, FBN2, GORAB, MYLK, NBAS, PYCR1, PRDM5, TGFB2, XYLT1, ZNF469	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)

Analyte (measurand)	Test material (matrix)	Test technique
Hypertrophic cardiomyopathy: ACTC1, CAV3 , CSRP3, MYBPC3, MYH7, MYL2, MYL3, TCAP, TNNI3, TNNT2, TPM1, VCL, MYOZ2 advanced diagnostics: ACTN2, ANKRD1, CALR3, CASQ2, CRYAB, DES, FHL1, FLNC, GLA, JPH2, LAMP2, LDB3, MYH6, MYLK2, MYPN, NEXN, PLN, PRKAG2, TNNC1, TTN, TTR	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)
Dilated cardiomyopathy: LDB3, LMNA, MYBPC3, MYH7, PLN, SCN5A, TNNT2 advanced diagnostics: ABCC9, ACTC1, ACTN2, ANKRD1, BAG3, CALR3, CASQ2, CRYAB, CSRP3, DES, DMD, DSG2, DSP, EMD, EYA4, FKTN, FLNC, GATAD1, JPH2, LAMA4, LAMP2, MYH6, MYL2, MYL3, MYLK2, MYPN, NEXN, PRDM16, PRKAG2, PSEN1, PSEN2, RAF1, RBM20, SDHA, SGCD, TAZ, TCAP, TMPO, TNNC1, TNNI3, TPM1, TTN, TTR, VCL	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)
Pulmonary hypertension: ACVRL1, ACVRL1 (MLPA), AQP1, BMPR1B, BMPR2, BMPR2 (MLPA), CAV1, EIF2AK4, ENG, ENG (MLPA), GDF2, KCNA5, KCNK3, SMAD4, SMAD9, SOX17, TBX4	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)

Analyte (measurand)	Test material (matrix)	Test technique
MODY: ABCC8, APPL1, BLK, CEL, GCK, HNF1A, HNF1B, HNF4A, INS, KCNJ11, KLF11, NEUROD1, PAX4n, PDX1 advanced diagnostics: AKT2, CAPN10, CISD2, GCGR, GLIS3, GLUD1, HADH, INSR, IRS1, IRS2, KDM6A, KMT2D, MAPK8IP1, PGM1, PMM2, PPARG, PPP1R3A, PTF1A, SLC16A1, SLC2A2, TBC1D4, WFS1, ZFP57	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)
Obesity: AGRP, DYRK1B, LEP, LEPR, MC3R, MC4R, NR0B2, PPARG, SIM1, UCP3, NTRK2, POMC, PCSK1	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)
Endocrine tumours: DICER1, MEN1, NF1, CDKN1B, RET, SDHA, CDC73 advanced diagnostics: AIP, BAP1, CDKN2A, FH, MAX, K1F1B, PTEN, SDHAF2, SDHB, SDHC, TMEM127, SDHD, VHL	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)

Analyte (measurand)	Test material (matrix)	Test technique
Thyroid gland: DUOX2, DUOXA2, SLC5A5, TG, TPO, TSHR, NKX2-5, PAX8, TSHB advanced diagnostics: FOXE1, GLIS3, GNAS, IGSF1, IYD, NKX2-1, SLC16A2, SLC26A4, THRA, THRB	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)
Hyperinsulinism: ABCC8, KCNJ11, GLUD1, GCK, HADH, INSR, SLC16A1, HNF4A, UCP2, HNF1A, KDM6A, KCNQ1 advanced diagnostics: ALG3, CACNA1C, KMT2D, MPI, NSD1, PAX6, PGM1, PMM2, TRMT10A	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)
Hypercalcaemia (FHH) / hypocalcaemia (ADH): CASR advanced diagnostics level II: GNA11, AP2S1	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)

Analyte (measurand)	Test material (matrix)	Test technique
Agammaglobulinaemia (PID): BLNK, BTK, CD79A, CD79B, CTPS1, IGHM, IGLL1, IKZF1, LRRC8A, PIK3CD, PIK3R1, RAG1, TCF3, TFRC	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect whole exome sequencing with bioinformatic limitation to genes to be examined) Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)
Growth hormone deficiency (IGHD / CGHD): BTK, GH1, GHR, GHRHR, GHSR, GLI2, HESX1, IGF1, IGF1R, LHX3, LHX4, OTX2, POU1F1, PROP1, RNPC3, SOX2, SOX3, TBX19	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)

Analyte (measurand)	Test material (matrix)	Test technique
T-B SCID: ADA, AK2, CD247, CD3D, CD3E, CD3G, CORO1A, FOXN1, IL2RG, IL7R, JAK3, LAT, NBN, PNP, PTPRC, SMARCAL1, ZAP70	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect whole exome sequencing with bioinformatic limitation to genes to be examined) Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)
T-B+ SCID: ADA, AK2, DCLRE1C, LIG4, NHEJ1, PRKDC, RAG1, RAG2	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect whole exome sequencing with bioinformatic limitation to genes to be examined) Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)

Analyte (measurand)	Test material (matrix)	Test technique
Mendelian susceptibility to mycobacterial diseases (MSMD): CARMIL2, CYBB, IFNGR1, IFNGR2, IKBKG, IL12B, IL12RB1, IRF8, ISG15, NFKBIA, RORC, STAT1, TYK2	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect whole exome sequencing with bioinformatic limitation to genes to be examined) Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)
Autoimmune lymphoproliferative syndrome (ALPS): CASP10, CASP8, CTLA4, FADD, FAS, FASLG, KRAS, LRBA, PIK3CD, PIK3R1, STAT1, STAT3	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect whole exome sequencing with bioinformatic limitation to genes to be examined) Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)

Analyte (measurand)	Test material (matrix)	Test technique
Very early onset inflammatory bowel disease (VEO-IBD): DUOX2, FOXP3, IL10, IL10RA, IL10RB, IL21, LRBA, RIPK1, SKIV2L, XIAP	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect whole exome sequencing with bioinformatic limitation to genes to be examined) Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)
Hereditary angioedema (HAE): SERPING1, F12, PLG, CPN1, XPNPEP2, ADGRE2, TNFRSF1A, PLCG2, NLRP3, IL1RN, MEFV, HMBS, TNFAIP3	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect whole exome sequencing with bioinformatic limitation to genes to be examined) Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)

Analyte (measurand)	Test material (matrix)	Test technique
Phagocyte function disorders (e.g. septic granulomatosis): CEBPE, CYBA, CYBB, FERMT3, H6PD, IKBKG, IRAK4, ITGB2, MPO, MYD88, NCF1, NCF2, NCF4, NFKBIA, OTC, RAC1, RAC2, SLC35C1, XK	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect whole exome sequencing with bioinformatic limitation to genes to be examined) Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)
HSV1 susceptibility: FCGR3A, GATA2, IRF3, IKBKG, STAT1, STAT2, TBK1, TLR3, TRAF3, TICAM1, TYK2, UNC93B1	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect whole exome sequencing with bioinformatic limitation to genes to be examined) Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)
Craniosynostoses: ERF, FGFR1, FGFR2, FGFR3, IFT122, IL11RA, MSX2, RAB23, SKI, SMAD6, TCF12, TWIST1 advanced diagnostics: IFT140, IFT43, IMPAD1, IRX5, KAT6A, KRAS, MEGF8, MYH3, P4HB, POR, RECQL4, SCARF2, SEC24D, SMO, SPECC1L, STAT3, TGFBR1, TGFBR2, WDR19, WDR35, ZIC1	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional

Analyte (measurand)	Test material (matrix)	Test technique
Congenital myasthenic syndromes: ALG14, CHAT, CHRNA1, CHRNB1, CHRND, CHRNE, COLQ, DOK7, DPAGT1, GFPT1, GMPPB, MUSK, RAPSN, SLC5A7, VAMP1 advanced diagnostics: ALG2, AGRN, CHRNG, COL13A1, LAMB2, LRP4, PLEC, PREPL, SCN4A, SLC18A3, SLC25A1, SNAP25, SYT2	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)
Heavy_COVID-19_performance: IFNAR1, IFNAR2, IKBKGnd, IRF1, IRF3, IRF7, IRF9, STATnd, STAT2n, TBK1, TICAM1, TLR3, TRAF3	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect whole exome sequencing with bioinformatic limitation to genes to be examined) Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)

Analyte (measurand)	Test material (matrix)	Test technique
Lymphoedema: SLYMPH: ADAMTS3 , CCBE1 , EPHB4 , FLT4 , FOXC2, GJC2, GATA2, PIEZO1, VEGFC advanced diagnostics: DCHS1 , FAT4, GJA1, KIF11, PTPN14 , SOX18	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect whole exome sequencing with bioinformatic limitation to genes to be examined) Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)
Hypercholesterolaemia: ABCG5,ABCG8,APOB100 (Exon 26);APOE,CYP27A1,DHCR7,LDLR;LDLRAP1;NPC1L1,LIPA,PCSK9,SORT1,STAP1,Hyperchol.Sequ.	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)
Combined hyperlipidaemia: APOA5,APOB (Exon 26),ApoC2, APOE,GPIHBP1,LDLR,LDLRAP1,LPL,NPC1L1,PCSK9,SORT1,USF1	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)

Analyte (measurand)	Test material (matrix)	Test technique
Lipid metabolism disorder due to LDL deficiency: ANGPTL3,APOB, APOE, MTTP,NPC1L1,PCSK9, SAR1B	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)
Lipid metabolism disorder due to HDL deficiency: ABCA1, ANGPTL4, APOA1,APOA2, APOA4, ApoC3, CEPT, LCAT, LIPC, LIPG, NPC1, NPC2, SCARB1, SMPD1	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)

Analyte (measurand)	Test material (matrix)	Test technique
Lipodystrophy: AGPAT2, BANF1,CAV1,CIDEC,KCNJ6,LEP,LIPE, LMNA, PCYT1A,PIK3R1b, PLIN1, POLD1, PPARG, PSMB8, PTRF, SPRTN, ZMPSTE24	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)
Statin-associated myopathy: ACADM, ACADS, ACADVL, AMPD1, CACNA1S, CAV3, CPT2, LPIN1, PYGM, RYR1 (Exons 8,17)	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)
Col3A1, TNXB	EDTA blood, DNA	MLPA analysis
FBN1; TGFBR2	EDTA blood, DNA	MLPA analysis
Nephronophthisis: INVS, NPHP1 (Inkl. MLPA), NPHP3, NPHP4, IQCB1, CEP290, GLIS2, TMEM67, RPGRIP1L, NEK8, SDCCAG8, TTC21B, WDR19, ZNF423, CEP164, ANKS6, IFT172, CEP83, DCDC2, MAPKBP1, AHI1, ANKS6, CC2D2A, PAX2, TMEM216, TMEM237, XPNPEP3	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect whole exome sequencing with bioinformatic limitation to genes to be examined) Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)

Analyte (measurand)	Test material (matrix)	Test technique
Nephrotic syndrome: focal segmental glomerulosclerosis (FSGS), Alport syndrome: ACTN4, ARHGDIA, CD2AP, COL4A3, COL4A4, DGKE, EMP2, NPHS1, NPHS2, TRPC6, NPHP1, NPHP3, NPHP4, AVIL, NEK8, ANLN, COL4A5, COQ2, COQ6, COQ8B, CRB2, CUBN, FN1, GLA, ITGA3, ITGB4, KANK2, LAMB2, LMX1B, MYH9, MYO1E, NUP107, NUP205, NUP93, PAX2, PDSS2, PLCE1, PTPRO, SCARB2, SMARCAL1, SGPL1, TBC1D8B, TTC21B, WDR73, WT1, APOL1, CFH, CLCN5, LMNA, EYA1, CD151, PXDN	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect whole exome sequencing with bioinformatic limitation to genes to be examined) Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)
Alport syndrome and thin basement membrane type nephropathies: COL4A3, COL4A4, COL4A5, FN1, CD151, MYH9, PXDN	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect whole exome sequencing with bioinformatic limitation to genes to be examined) Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)

Analyte (measurand)	Test material (matrix)	Test technique
Senior Løken syndrome, nephronophthisis with retinal degeneration: NPHP1 (Including MLPA), NPHP3, NPHP4, IQCB1, WDR19, CEP290, SDCCAG8, TRAF3IP1, CEP164, ZNF423, INVS	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect whole exome sequencing with bioinformatic limitation to genes to be examined) Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)
Joubert syndrome: NPHP1 (including MLPA), CC2D2A, AHI1, TMEM67, TMEM216, CEP290, RPGRIP1L, CEP104, TMEM237, ARMC9, PDE6D, ARL13B, CPLANE1, CEP120, CEP41, CSPP1, INPP5E, TCTN3, SUFU, ARL3, TMEM138, TCTN1, TCTN2, PIBF1, KIAA0586, KIAA0556, ZNF423, TMEM231,TMEM107, B9D1, MKS1, B9D2, TTC21B, HYLS1, ATXN10, POC1B	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect whole exome sequencing with bioinformatic limitation to genes to be examined) Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)

Analyte (measurand)	Test material (matrix)	Test technique
Meckel Gruber syndrome: B9D1, B9D2, CC2D2A, CEP290, MKS1, RPGRIP1L, TCTN2, TMEM67, TMEM138, TMEM216, CEP41, CPLANE1, CSPP1, KIF14, NPHP3, TCTN3, TMEM107, TMEM231, TMEM237, TTC21B	EDTA blood, DNA;	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect whole exome sequencing with bioinformatic limitation to genes to be examined) Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)
Autosomal dominant tubular kidney disease: UMOD, MUC1 (without VNTR), HNF1B, REN, SEC61A1	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect whole exome sequencing with bioinformatic limitation to genes to be examined) Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)
Bartter syndrome and Gittelman syndrome: BSND, CASR, CLCN5, CLCNKA, CLCNKB, CTNS, GNA11, INSR, KCNJ1, MAGED2, SLC12A1, SLC12A3	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect whole exome sequencing with bioinformatic limitation to genes to be examined) Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)

Analyte (measurand)	Test material (matrix)	Test technique
Kidney stones (including FHHNC familial hypomagnesaemia with hypercalciuria and nephrocalcinosis): AGXT, CLCN5, CLDN16, CLDN19, CNNM2, CYP24A1, GRHPR, HOGA1, KCNJ1, SLC12A1, SLC3A1, SLC7A9, KCNA1, TRPM6, ADCY10, APRT, ATP6V0A4, ATP6V1B1, CA2, CASR, CLCNKB, FAM20A, HNF4A, HPRT1, ATP1A1, FXYD2, MAGED2, OCRL, SLC26A1, SLC22A12, SLC2A9, SLC34A1, SLC34A3, SLC4A1, SLC9A3R1, VDR, XDH, EGF	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect whole exome sequencing with bioinformatic limitation to genes to be examined) Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)
Complement-mediated diseases: CFH (inkl. MLPA), CFHR1 (including MLPA), CFHR3 (including MLPA) CFI, CD46, CFB, CFD, KCNT2 (including MLPA), CFHR5 (inkl. MLPA), C3, THBD, MMACHC, DGKE	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect whole exome sequencing with bioinformatic limitation to genes to be examined) Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)

Analyte (measurand)	Test material (matrix)	Test technique
Renal carcinoma: BAP1, FH, FLCN, MET, PTEN, SDHB, TP53, TSC1, TSC2, VHL, WT1, CHEK2, DICER1, DIS3L2, GPC3, SDHA, SDHAF2, SDHC, SDHD, SMARCA4, SMARCB1	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect whole exome sequencing with bioinformatic limitation to genes to be examined) Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)
CAKUT (congenital anomalies of the kidneys and urinary tract): BICC1, BMP4, DSTYK, EYA1, HNF1B, ITGA8, MUC1 (ohne VNTR), PAX2, SALL1, SIX1, UMOD, WT1, ACE, ACTG2, AGT, BNC2, AGTR1, CHRM3, FAT4, FGF20, FRAS1, FREM1, FREM2, GATA3, CHRNA3, GDNF, GLI3, GRIP1, HPSE2, KIF14, LRIG2, NEK8, PBX1, REN, RET, ROBO2, SIX5, WNT4, ZIC3, TBX18, NRIP1, ZBTB24, SOX11, SOX17, CTNS, PKHD1	EDTA blood, DNA	Next generation sequencing (sequencer: Illumina, enrichment method: Agilent SureSelect whole exome sequencing with bioinformatic limitation to genes to be examined) Win - NovaSeq Control Software, Illumina bcl2fastq, Illumina Sequencing Analysis Viewer, Integrated Genomics Viewer, JSI SeqPilot; Linux x64 - FastQC, bwa, samblaster, samtools, GATK Best Practices, bedtools, qualimap, bcftools, multiqc, R, Exomiser; Web - Qiagen Ingenuity HGMD Professional (commercial)

Department of Human Genetics (Tumour Cytogenetics)

Location: Augustenburger Platz 1, Südring 11, 13353 Berlin

Test area: Human genetics (Cytogenetics)

Type of test:

Chromosome analysis**

Analyte (measurand)	Test material (matrix)	Test technique
Acquired chromosome set	Bone marrow/blood/cerebrospinal fluid/pleural puncture	Chromosome banding analysis
Acquired chromosome set	Bone marrow/blood/cerebrospinal fluid/pleural puncture	Fluorescence in situ hybridisation (FISH)

Department of Immunology

Location: Sylter Straße 2, 13353 Berlin

Test area: Clinical chemistry

Type of test:
Microscopy

Analyte (measurand)	Test material (matrix)	Test technique
Differential blood count	EDTA blood, BAL	Microscopy

Test area: Immunology

Type of test:
Ligand assay **

Analyte (measurand)	Test material (matrix)	Test technique
TNF alpha	Heparin plasma, culture supernatants	Chemiluminescence immunoassay
sIL-2R	EDTA plasma, serum, cerebrospinal f	Chemiluminescence immunoassay
IL-6	EDTA plasma, culture supernatants, urine	Chemiluminescence immunoassay
IL-8	EDTA plasma	Chemiluminescence immunoassay
IL-10	Heparin plasma, culture supernatants	Chemiluminescence immunoassay
IL-1RA	Plasma, serum, culture supernatants	ELISA
LBP	EDTA plasma	Chemiluminescence immunoassay
Erythrocyte lysis for determination of total IL-8	EDTA blood	Chemiluminescence immunoassay
Anti-pneumococcal polysaccharide IgG2	Serum	ELISA
Anti-pneumococcal capsular polysaccharide (PCP) IgG	Serum	ELISA
Anti-tetanus toxoid IgG	Serum	ELISA
Mannose binding lectin (MBL)	Heparin plasma or serum	ELISA
Human phospho-tau	Cerebrospinal fluid	ELISA
Human total tau	Cerebrospinal fluid	ELISA
Human beta-amyloid (1-42)	Cerebrospinal fluid	ELISA
Human beta-amyloid (1-40)	Cerebrospinal fluid	ELISA
S100A8/9	Serum	ELISA
NF-L	Cerebrospinal fluid	ELISA
VEGF-A/IL-17A	Serum, plasma (EDTA, heparin citrate), urine	ELISA

Analyte (measurand)	Test material (matrix)	Test technique
MCP-1/IP-10	Serum, plasma (EDTA, heparin citrate), urine	ELISA
NF-L	Serum	ELISA
γ-interferon (quantiferon, tuberculosis TB)	Heparin whole blood	ELISA

Type of test:
Flow cytometry**

Analyte (measurand)	Test material (matrix)	Test technique
Lymphocyte subpopulations	EDTA blood, BAL	Flow cytometry
Acute and chronic T-cell activation	EDTA blood	Flow cytometry
HLA-DR expression on monocytes	EDTA blood	Flow cytometry
Cytometric bead array Th1/ Th2	Heparin blood	Flow cytometry
B-cell subpopulations	EDTA blood	Flow cytometry
Typing of B lymphocytes in peripheral blood	EDTA blood	Flow cytometry
CD7 and CD26 expression on CD4+ T lymphocytes	EDTA blood	Flow cytometry
CD20-positive B lymphocytes	EDTA blood	Flow cytometry
Effector/memory and regulatory CD4+ T cells	EDTA blood	Flow cytometry
T-cell receptor typing	EDTA blood	Flow cytometry
Recent thymic emigrants	EDTA blood	Flow cytometry
T-lymphocyte subpopulations	EDTA blood, BAL	Flow cytometry
CD15s/CD18 on neutrophils (LAD I/II)	EDTA blood	Flow cytometry
Dendritic cells in peripheral blood	EDTA blood	Flow cytometry
CD169 expression on monocytes	EDTA blood	Flow cytometry
CD40L and ICOS expression of T cells after stimulation with PMA and ionomycin	Heparin blood	Flow cytometry
BTK	EDTA blood	Flow cytometry
Phenotyping of tuberculosis antigen-specific CD4+ T cells -TB flow assay	Heparin blood	Flow cytometry

Type of test:

Cell function tests **

Analyte (measurand)	Test material (matrix)	Test technique
Phagocytosis (phagotest)	Heparin blood	In vitro stimulation test
Oxygen radical formation	Heparin blood	In vitro stimulation test
TBC antigen-specific T cells	Citrate blood	In vitro stimulation test
Type 1 pathway defects	Heparin blood	In vitro stimulation test
Cytokines after LPS stimulation	Heparin blood	In vitro stimulation test
Cytokines after Con A stimulation	Heparin blood	In vitro stimulation test
Lymphocyte transformation test with mitogens	Citrate blood, heparin blood	3H-thymidine
Toll-like receptor diagnostics	Heparin blood	In vitro stimulation test
CD62L-shedding on granulocytes after TLR stimulation	Heparin blood	In vitro stimulation test
NK cell function test	Heparin blood	In vitro stimulation test
CMV antigen-specific T cells	Citrate blood	In vitro stimulation test
EBV antigen-specific T cells	Citrate blood	In vitro stimulation test

Department of Allergy Diagnostics

Location: Sylter Straße 2, 13353 Berlin

Test area: Immunology

Type of test:
Ligand assays**

Analyte (measurand)	Test material (matrix)	Test technique
Allergen-specific IgE; allergen-specific IgG	Serum, plasma (EDTA, heparin)	Fluorescence immunoassay
Total IgE	Serum, plasma (EDTA, heparin)	Fluorescence immunoassay
Tryptase	Serum, plasma (EDTA, heparin)	Fluorescence immunoassay

Department of Autoimmune Diagnostics

Location: Sylter Straße 2, 13353 Berlin

Test area: Immunology

Type of test:
Ligand assays**

Analyte (measurand)	Test material (matrix)	Test technique
Acetylcholine receptor antibodies	Serum	ELISA
ACPA	Serum	ELISA
ANCA combi BPI	Serum	ELISA
ANCA combi cathepsin	Serum	ELISA
ANCA combi elastase	Serum	ELISA
ANCA combi lactoferrin	Serum	ELISA
ANCA combi lysozyme	Serum	ELISA
ANCA combi MPO	Serum	ELISA
ANCA combi PR3	Serum	ELISA
c-ANCA ELISA (Pr-3 antibodies)	Serum	ELISA
p-ANCA ELISA (MPO antibodies)	Serum	ELISA
ASGPR antibodies	Serum	ELISA
beta 2-glycoprotein I screen	Serum	ELISA
beta 2-glycoprotein I antibodies (IgG/IgM)	Serum	ELISA
BP-180 antibodies	Serum	ELISA
BP-230 antibodies	Serum	ELISA
Cardiolipin antibodies (IgG/IgM)	Serum	ELISA
Desmoglein-1 antibodies	Serum	ELISA
Desmoglein-3 antibodies	Serum	ELISA
dsDNA antibodies	Serum	ELISA
ENA screen	Serum	ELISA
ENA-ANA combi Jo-1	Serum	ELISA
ENA-ANA combi La (SS-B)	Serum	ELISA
ENA-ANA combi RNP-70	Serum	ELISA
ENA-ANA combi Ro (SS-A)	Serum	ELISA
ENA-ANA combi Scl 70	Serum	ELISA
ENA-ANA combi Sm	Serum	ELISA
ENA-ANA combi U1RNP	Serum	ELISA
ENA-ANA combi centromere	Serum	ELISA
GAD antibodies	Serum	ELISA
Gliadin antibodies (IgA/IgG)	Serum	ELISA
DGP IgA/G	Serum	ELISA
Myelin-associated glycoprotein (MAGp) antibodies	Serum	ELISA

Analyte (measurand)	Test material (matrix)	Test technique
Phosphatidylserine antibodies	Serum	ELISA
Rheumatoid factor IgA/IgM	Serum	ELISA
MuSK antibodies	Serum	ELISA
Anti-PLA2R	Serum	ELISA
Angiotensin II receptor	Serum	ELISA
Endothelin receptor subtype A	Serum	ELISA
SLA/LP antibodies	Serum	ELISA
Sp-100 antibodies	Serum	Mechanised solid phase enzyme immunoassay
Tissue transglutaminase antibodies	Serum	ELISA
Circulating immune complexes	Serum	ELISA
DFS70 antibodies	Serum	ELISA
AMA-M2	Serum	Mechanised solid phase enzyme immunoassay
Annexin antibodies (IgG/IgM)	Serum	Mechanised solid phase enzyme immunoassay
ASCA (IgG/IgM)	Serum	Mechanised solid phase enzyme immunoassay
C1q antibodies	Serum	Mechanised solid phase enzyme immunoassay
ENA differentiation Jo-1	Serum	Mechanised solid phase enzyme immunoassay
ENA differentiation La (SS-B)	Serum	Mechanised solid phase enzyme immunoassay
ENA differentiation RNP70	Serum	Mechanised solid phase enzyme immunoassay
ENA differentiation Ro (SS-A)	Serum	Mechanised solid phase enzyme immunoassay
ENA differentiation Scl70	Serum	Mechanised solid phase enzyme immunoassay
ENA differentiation U1RNP/Sm complex	Serum	Mechanised solid phase enzyme immunoassay
ENA differentiation centromere B	Serum	Mechanised solid phase enzyme immunoassay
α-fodrin antibodies	Serum	Mechanised solid phase enzyme immunoassay
Glomerular basement membrane antibodies (GBM Ab)	Serum	Mechanised solid phase enzyme immunoassay
Intrinsic factor antibodies	Serum	Mechanised solid phase enzyme immunoassay
Nucleosome antibodies	Serum	Mechanised solid phase enzyme immunoassay
Prothrombin antibodies	Serum	Mechanised solid phase enzyme immunoassay
Histones	Serum	Mechanised solid phase enzyme immunoassay

Analyte (measurand)	Test material (matrix)	Test technique
Ribosome antibodies	Serum	Mechanised solid phase enzyme immunoassay
Systemic sclerosis (nucleoli) profile (IgG) (Scl-70, CENP A, CENP B, RP11, RP155, fibrillarin, NOR90, Th/To, PM-Scl75, PM-Scl100, Ku, PDGFR, Ro-52)	Serum	Immunoblot
ANA profile blot (AMA-M2, CENP-B, dsDNA, Scl70, histones, Jo-1, nucleosomes, PCNA, Pm-Scl, ribosomal P protein, nRNP/Sm, Sm, Ro 52, SSA/Ro, SSB/La, Scl70)	Serum	Immunoblot
Ganglioside antibodies IgG/IgM (GM1, GM2, GM3, GD1a, GD1b, GT1b and Gq1b)	Serum	Immunoblot
Liver profile blot (AMA-2, M2-3E (BPO), Sp100, PML, gp210, LKM-1, LC-1, SLA/LP, and Ro-52)	Serum	Immunoblot
Paraneoplastic neurological syndromes 12 Ag (amphiphysin, CV2 (CRMP5), Hu, Ri, PNMA2 (Ma2/Ta), Yo, recoverin, SOX1, titin, Zic4, GAD65, Tr (DNER)	Serum	Immunoblot
Myositis profile 15 Ag(Mi-2a, Mi-2ß, TIF1y, MDA5, NXP2, SAE1, Ku, PM-Scl100, PM-Scl75, SRP, PL-7, PL-12, EJ, OJ, Ro-52	Serum	Immunoblot
Neuronal antibody blot (amphiphysin, CV2(CRMP5), Hu, PNMA2(Ma2/Ta), Ri and Yo)	Serum	Immunoblot

Type of test:

Microscopy**

Analyte (measurand)	Test material (matrix)	Test technique
Anti-PLA2 R-IIFT	Serum	Indirect immunofluorescence on PLA2R-transfected cells
Anti-DPPX	Serum/cerebrospinal fluid	Indirect immunofluorescence on DPPX-transfected cells
Anti-CASPR2	Serum/cerebrospinal fluid	Indirect immunofluorescence on CASPR2-transfected cells
Anti-LGI1	Serum/cerebrospinal fluid	Indirect immunofluorescence on LGI1-transfected cells
Anti-GABAR B1/B2	Serum/cerebrospinal fluid	Indirect immunofluorescence on GABA-R B1/B2-transfected cells
Anti-glutamate receptors (NMDA)	Serum/cerebrospinal fluid	Indirect immunofluorescence on NMDAR-transfected cells

Analyte (measurand)	Test material (matrix)	Test technique
Anti-glutamate receptors (AMPA1/2)	Serum/cerebrospinal fluid	Indirect immunofluorescence on AMPA1/2-transfected cells
Antibodies against nerve tissue and cerebellar agenesis	Serum/cerebrospinal fluid	Indirect immunofluorescence on cerebellum, nerves, intestine
Anti-GAD65-IIFT	Serum/cerebrospinal fluid	Indirect immunofluorescence on GAD65-transfected cells
Anti-mitochondrial antibodies (AMA)	Serum	Indirect immunofluorescence on rat tissue section
Antinuclear antibodies (ANA)	Serum	Indirect immunofluorescence on HEp-2 cells
ANCA-IF	Serum	Indirect immunofluorescence on human granulocytes
Aquaporin-4 antibodies	Serum	Indirect immunofluorescence on aquaporin-4-transfected cells
dsDNA antibodies/Crithidia	Serum	Crithidia lucilae immunofluorescence test (CLIFT)
Endomysium antibodies IgA	Serum	Indirect immunofluorescence on monkey oesophagus
Smooth muscle antibodies (SMA)	Serum	Indirect immunofluorescence on rat tissue section
Glutamate receptor NMDA antibodies	Serum, cerebrospinal fluid	Indirect immunofluorescence on NMDA-transfected cells
Anti-skin antibodies	Serum	Indirect immunofluorescence on monkey oesophagus
LKM antibodies	Serum	Indirect immunofluorescence on rat tissue section
Parietal cell antibodies (PCA)	Serum	Indirect immunofluorescence on rat tissue section
Adrenal antibodies	Serum	Indirect immunofluorescence on monkey adrenal gland
Sarcolemma antibodies (myocardial reactive antibodies)	Serum	Indirect immunofluorescence on monkey myocardium
Skeletal muscle antibodies	Serum	Indirect immunofluorescence on monkey myocardium

Type of test:

Molecular biological tests (amplification procedures)*

Analyte (measurand)	Test material (matrix)	Test technique
HLA-B27	EDTA whole blood	PCR

Department of Haematology/Oncology

Location: Campus Virchow-Klinikum (CVK) Sylter Straße 2, 13353 Berlin

Test area: Clinical chemistry (haematology)

Type of test:
Microscopy**

Analyte (measurand)	Test material (matrix)	Test technique
Differential blood count	EDTA whole blood	Light microscopy after staining
Esterase	EDTA whole blood, bone marrow	Light microscopy after staining
Fragmentocytes	EDTA whole blood	Light microscopy after staining
Peroxidase positive cells	EDTA whole blood, smears, bone	Light microscopy after staining
Ferritin	EDTA whole blood, bone marrow	Light microscopy after staining
Bone marrow cytology	Bone marrow	Light microscopy after staining
Cytomorphology	Pleural and ascites puncture	Light microscopy after staining
CSF morphology	Cerebrospinal fluid	Light microscopy after staining
Components containing carbohydrat	EDTA whole blood, bone marrow	Light microscopy after staining (PAS reaction)

Type of test:
Qualitative test (simple) with visual check

Analyte (measurand)	Test material (matrix)	Test technique
Osmotic resistance	EDTA whole blood	Titration

Test area: Immunology

Type of test:
Flow cytometry**

Analyte (measurand)	Test material (matrix)	Test technique
Leukaemia typing	EDTA whole blood, bone marrow, cerebrospinal fluid, puncture	Immunophenotyping of haematopoietic cells
Lymphoma typing	EDTA whole blood, bone marrow, cerebrospinal fluid, puncture	Immunophenotyping of haematopoietic cells
Lymphocyte typing (immune status)	EDTA whole blood	Immunophenotyping of haematopoietic cells

Analyte (measurand)	Test material (matrix)	Test technique
Plasmocytoma (MM)	EDTA whole blood, bone marrow, cerebrospinal fluid, puncture	Immunophenotyping of haematopoietic cells
CD34+ cells	EDTA whole blood, bone marrow	Immunophenotyping of haematopoietic cells
PNH diagnostics	EDTA whole blood	Immunophenotyping of haematopoietic cells
Spherocytosis (EMA test)	EDTA whole blood	Immunophenotyping of haematopoietic cells
Leukocytes	EDTA blood, bone marrow	Flow cytometry
Lymphocytes	EDTA blood, bone marrow	Flow cytometry

Test area: Human Genetics (human molecular genetics)

Type of test:
Molecular biological tests (amplification procedures)**

Analyte (measurand)	Test material (matrix)	Test technique
Acute lymphoblastic leukemia (fusion gene MLL-AF4)	EDTA blood or bone marrow	RT PCR
Acute lymphoblastic leukemia at initial diagnosis (fusion gene E2A-PBX1)	EDTA blood or bone marrow	RT PCR
Acute lymphoblastic leukemia at initial diagnosis (fusion gene TEL-AML)	EDTA blood or bone marrow	RT PCR
Acute lymphoblastic leukaemia in progression (fusion gene TEL-	EDTA blood or bone marrow	RT-quant. PCR
Acute lymphoblastic leukemia, chronic myeloid leukemia at initial diagnosis (fusion gene BCR-ABL-minor)	EDTA blood or bone marrow	Nested RT-PCR
Acute lymphoblastic leukemia, chronic myeloid leukemia in progression (fusion gene BCR-ABL minor)	EDTA blood or bone marrow	RT-quant. PCR
Acute myeloid leukaemia (CEBPA)	EDTA blood or bone marrow	Sanger DNA sequencing
Acute myeloid leukaemia (CEBPA)	EDTA blood or bone marrow	Massive parallel sequencing (NGS) using sequencing-by-synthesis (MiSeqTM/IlluminaTM) MiSeq Reporter Illumina Sequencing Analysis Viewer VariantStudio Integrated Genomics Viewer
Acute myeloid leukaemia (FLT3, exon 20)	EDTA blood or bone marrow	Sanger DNA sequencing

Analyte (measurand)	Test material (matrix)	Test technique
Acute myeloid leukaemia (FLT3, exons 14, 15, 20)	EDTA blood or bone marrow	Massive parallel sequencing (NGS) using sequencing-by-synthesis (MiSeqTM/IlluminaTM) MiSeq Reporter Illumina Sequencing Analysis Viewer VariantStudio Integrated Genomics Viewer
Acute myeloid leukaemia (NPM1, exon 12)	EDTA blood or bone marrow	Sanger DNA sequencing
Acute myeloid leukaemia (NPM1, exon 12)	EDTA blood or bone marrow	Massive parallel sequencing (NGS) using sequencing-by-synthesis (MiSeqTM/IlluminaTM) MiSeq Reporter Illumina Sequencing Analysis Viewer VariantStudio Integrated Genomics Viewer
Acute myeloid leukemia at initial diagnosis (fusion gene AML1-ETO)	EDTA blood or bone marrow	RT PCR
Acute myeloid leukemia at initial diagnosis (fusion gene CBFB-MYH11)	EDTA blood or bone marrow	RT PCR
Acute myeloid leukemia at initial diagnosis (fusion gene PML-RARA)	EDTA blood or bone marrow	RT PCR
Acute myeloid leukemia at initial diagnosis or in progression (FLT3-D835)	EDTA blood or bone marrow	PCR, restriction analysis, fragment analysis
Acute myeloid leukemia at initial diagnosis or in progression (FLT3-internal tandem duplication)	EDTA blood or bone marrow	PCR + fragment analysis
Acute myeloid leukemia in progression (fusion gene AML1-ETO)	EDTA blood or bone marrow	RT-quant. PCR
Acute myeloid leukemia in progression (fusion gene CBFB-MYH11)	EDTA blood or bone marrow	RT-quant. PCR

Analyte (measurand)	Test material (matrix)	Test technique
Acute myeloid leukemia in progression (fusion gene PML-RARA)	EDTA blood or bone marrow	Quant. PCR
Acute myeloid leukaemia in progression (NPM1, c.863_864insTCTG, c.863_864insCATG, c.863_864insCCTG)	EDTA blood or bone marrow	Quant. PCR
Acute myeloid leukaemia, myelodysplastic syndrome (DNMT3A, exons 8-10 and 15-23)	EDTA blood or bone marrow	Massive parallel sequencing (NGS) using sequencing-by-synthesis (MiSeqTM/IlluminaTM) MiSeq Reporter Illumina Sequencing Analysis Viewer VariantStudio Integrated Genomics Viewer
Acute myeloid leukaemia, myelodysplastic syndrome (RUNX1, exons 3-8)	EDTA blood or bone marrow	Massive parallel sequencing (NGS) using sequencing-by-synthesis (MiSeqTM/IlluminaTM) MiSeq Reporter Illumina Sequencing Analysis Viewer VariantStudio Integrated Genomics Viewer
Acute myeloid leukaemia, myelodysplastic syndrome, glioma (IDH1 and IDH2, exon 4)	EDTA blood or bone marrow	Sanger DNA sequencing
Acute myeloid leukaemia, myelodysplastic syndrome, glioma (IDH1 and IDH2, exon 4)	EDTA blood or bone marrow	Massive parallel sequencing (NGS) using sequencing-by-synthesis (MiSeqTM/IlluminaTM) MiSeq Reporter Illumina Sequencing Analysis Viewer VariantStudio Integrated Genomics Viewer
Acute myeloid leukaemia, myelodysplastic syndrome, myeloproliferative neoplasms (ASXL1, exon 13)	EDTA blood or bone marrow	Massive parallel sequencing (NGS) using sequencing-by-synthesis (MiSeqTM/IlluminaTM) MiSeq Reporter Illumina Sequencing Analysis Viewer VariantStudio Integrated Genomics Viewer

Analyte (measurand)	Test material (matrix)	Test technique
Acute myeloid leukaemia, myelodysplastic syndrome, Schinzel-Giedion syndrome (SETBP1, exon 4)	EDTA blood or bone marrow	Massive parallel sequencing (NGS) using sequencing-by-synthesis (MiSeqTM/IlluminaTM) MiSeq Reporter Illumina Sequencing Analysis Viewer VariantStudio Integrated Genomics Viewer
Chronic lymphocytic leukaemia, acute myeloid leukaemia, myelodysplastic syndrome, specific solid tumour diseases (TP53, exons 2-11)	EDTA blood or bone marrow	Massive parallel sequencing (NGS) using sequencing-by-synthesis (MiSeqTM/IlluminaTM) MiSeq Reporter Illumina Sequencing Analysis Viewer VariantStudio Integrated Genomics Viewer
Chronic lymphocytic leukaemia, acute myeloid leukaemia, myelodysplastic syndrome, specific solid tumour diseases (TP53, exons 4-9)	EDTA blood or bone marrow	Sanger DNA sequencing
Chronic myeloid leukemia in progression (fusion gene BCR-ABL major)	EDTA blood or bone marrow	Nested RT-PCR
Chronic myeloid leukemia in progression (fusion gene BCR-ABL major)	EDTA blood or bone marrow	RT-quant. PCR
Chronic myeloid leukemia, acute lymphoblastic leukemia (ABL1, exons 4-9)	EDTA blood or bone marrow	Sanger cDNA sequencing
Chronic myeloid leukemia, acute lymphoblastic leukemia at initial diagnosis (fusion gene BCR-ABL)	EDTA blood or bone marrow	Multiplex RT-PCR
Chronic neutrophil leukaemia, other myeloid neoplasms, unclear neutropenia (CSF3R, exons 14+17)	EDTA blood or bone marrow	Sanger DNA sequencing

Analyte (measurand)	Test material (matrix)	Test technique
Chronic neutrophil leukaemia, other myeloid neoplasms, unclear neutropenia (CSF3R, exons 14+17)	EDTA blood or bone marrow	Massive parallel sequencing (NGS) using sequencing-by-synthesis (MiSeqTM/IlluminaTM) MiSeq Reporter Illumina Sequencing Analysis Viewer VariantStudio Integrated Genomics Viewer
Hairy cell leukaemia (BRAF, c.1799T>A)	EDTA blood or bone marrow	Quant. PCR
Mastocytosis or acute myeloid leukemia at initial diagnosis or in progression (KIT, c.2447A>T)	EDTA blood or bone marrow	Quant. PCR
Measurement of the proportion of donor and recipient haematopoiesis after allogeneic stem cell or bone marrow transplantation (chimerism unsorted)	EDTA blood or bone marrow	Multiplex PCR with capillary electrophoresis
Myelodysplastic syndromes (MDS), myeloproliferative neoplasms (MPN), MPN/MDS mixed forms (e.g. CMML), acute myeloid leukaemia (TET2, exons 3-11)	EDTA blood or bone marrow	Massive parallel sequencing (NGS) using sequencing-by-synthesis (MiSeqTM/IlluminaTM) MiSeq Reporter Illumina Sequencing Analysis Viewer VariantStudio Integrated Genomics Viewer
Myelodysplastic syndrome or other myeloid diseases (U2AF1, exons 2+6)	EDTA blood or bone marrow	Massive parallel sequencing (NGS) using sequencing-by-synthesis (MiSeqTM/IlluminaTM) MiSeq Reporter Illumina Sequencing Analysis Viewer VariantStudio Integrated Genomics Viewer
Myelodysplastic syndrome, other myeloid diseases (SRSF2, exon 1)	EDTA blood or bone marrow	Massive parallel sequencing (NGS) using sequencing-by-synthesis (MiSeqTM/IlluminaTM) MiSeq Reporter Illumina Sequencing Analysis Viewer VariantStudio Integrated Genomics Viewer

Analyte (measurand)	Test material (matrix)	Test technique
Myelodysplastic syndrome, B-cell lymphomas, T-ALL, myeloproliferative neoplasms, acute myeloid leukaemia, other myeloid diseases (EZH2)	EDTA blood or bone marrow	Massive parallel sequencing (NGS) using sequencing-by-synthesis (MiSeqTM/IlluminaTM) MiSeq Reporter Illumina Sequencing Analysis Viewer VariantStudio Integrated Genomics Viewer
Myelodysplastic syndrome, refractory anaemia with ring sideroblasts (RARS), other myeloid diseases (SF3B1, exons 13-16)	EDTA blood or bone marrow	Massive parallel sequencing (NGS) using sequencing-by-synthesis (MiSeqTM/IlluminaTM) MiSeq Reporter Illumina Sequencing Analysis Viewer VariantStudio Integrated Genomics Viewer
Myeloproliferative neoplasia (CALR, exon 9)	EDTA blood or bone marrow	Sanger DNA sequencing
Myeloproliferative neoplasia (CALR, exon 9)	EDTA blood or bone marrow	Massive parallel sequencing (NGS) using sequencing-by-synthesis (MiSeqTM/IlluminaTM) MiSeq Reporter Illumina Sequencing Analysis Viewer VariantStudio Integrated Genomics Viewer
Myeloproliferative neoplasia at initial diagnosis or in progression (JAK2, c.1849G>T)	EDTA blood or bone marrow	Quant. PCR
Myeloproliferative neoplasia, primary myelofibrosis, essential thrombocythaemia (MPL, exon 10)	EDTA blood or bone marrow	Sanger DNA sequencing
Myeloproliferative neoplasia, primary myelofibrosis, essential thrombocythaemia (MPL, exon 10)	EDTA blood or bone marrow	Massive parallel sequencing (NGS) using sequencing-by-synthesis (MiSeqTM/IlluminaTM) MiSeq Reporter Illumina Sequencing Analysis Viewer VariantStudio Integrated Genomics Viewer
Myeloproliferative neoplasia, isolated erythrocytosis (JAK2, exons 12+14)	EDTA blood or bone marrow	Sanger DNA sequencing

Analyte (measurand)	Test material (matrix)	Test technique
Myeloproliferative neoplasia, isolated erythrocytosis (JAK2, exons 12+14)	EDTA blood or bone marrow	Massive parallel sequencing (NGS) using sequencing-by-synthesis (MiSeqTM/IlluminaTM) MiSeq Reporter Illumina Sequencing Analysis Viewer VariantStudio Integrated Genomics Viewer
Systemic mastocytosis, acute myeloid leukaemia (KIT, exons 8, 9, 11, 13, 17)	EDTA blood or bone marrow	Sanger cDNA sequencing
Systemic mastocytosis, acute myeloid leukaemia (KIT, exons 8, 9, 11, 13, 17)	EDTA blood or bone marrow	Massive parallel sequencing (NGS) using sequencing-by-synthesis (MiSeqTM/IlluminaTM) MiSeq Reporter Illumina Sequencing Analysis Viewer VariantStudio Integrated Genomics Viewer
T-lymphoblastic leukaemia, T-prolymphocytic leukaemia, Sézary syndrome, other T-cell neoplasms, SCID with defects of the T-cell and NK-cell series (JAK3, exon 13)	EDTA blood or bone marrow	Massive parallel sequencing (NGS) using sequencing-by-synthesis (MiSeqTM/IlluminaTM) MiSeq Reporter Illumina Sequencing Analysis Viewer VariantStudio Integrated Genomics Viewer
Toxicity of treatment with 5-fluorouracil (5-FU), capecitabine or tegafur (DPYD:dbSNP rs3918290, rs55886062, rs67376798, rs56038477)	EDTA blood	Fragment length analysis
T-cell large granular lymphocyte leukaemia (STAT3, exon 21)	EDTA blood or bone marrow	Sanger DNA sequencing

Location: Campus Benjamin Franklin Hindeburgdamm 30, 12351 Berlin

Test area: Clinical chemistry

Type of test:
Microscopy*

Analyte (measurand)	Test material (matrix)	Test technique
Differential blood count	EDTA whole blood	Light microscopy after staining
Esterase	EDTA whole blood, bone marrow	Light microscopy after staining
Fragmentocytes	EDTA whole blood	Light microscopy after staining
Peroxidase positive cells	EDTA whole blood, smears, bone marrow	Light microscopy after staining
Reticulocytes	EDTA whole blood, smears, bone marrow	Light microscopy after staining
Ferritin	EDTA whole blood, bone marrow	Light microscopy after staining
Bone marrow cytology	Bone marrow	Light microscopy after staining
CSF morphology	Cerebrospinal fluid	Light microscopy after staining
PAS	EDTA whole blood, bone marrow	Light microscopy after staining
Cytomorphology	Pleural and ascites puncture specimens, BAL, peritonial dialysate	Light microscopy after staining
Sickle cell detection	EDTA whole blood, smears	Light microscopy after staining

Test area: Immunology

Type of test:
Flow cytometry**

Analyte (measurand)	Test material (matrix)	Test technique
Leukaemia typing	EDTA whole blood, bone marrow, cerebrospinal fluid, puncture	Immunophenotyping of haematopoietic cells
Lymphoma typing	EDTA whole blood, bone marrow, cerebrospinal fluid, puncture	Immunophenotyping of haematopoietic cells
Lymphocyte typing (immune status)	EDTA whole blood	Immunophenotyping of haematopoietic cells
Plasmocytoma (MM)	EDTA whole blood, bone marrow, cerebrospinal fluid, puncture	Immunophenotyping of haematopoietic cells
CD34+ cells	EDTA whole blood, bone marrow	Immunophenotyping of haematopoietic cells

Location: Charité Campus Mitte (CCM) Charitéplatz 1, 10117 Berlin

Test area: Clinical chemistry (haematology)

Type of test:
Microscopy*

Analyte (measurand)	Test material (matrix)	Test technique
Differential blood count	EDTA whole blood	Light microscopy after staining
Esterase	EDTA whole blood, bone marrow	Light microscopy after staining
Fragmentocytes	EDTA whole blood	Light microscopy after staining
Peroxidase positive cells	EDTA whole blood, smears, bone marrow	Light microscopy after staining
Ferritin	EDTA whole blood, bone marrow	Light microscopy after staining
Bone marrow cytology	Bone marrow	Light microscopy after staining
Cytomorphology puncture specimen	Pleural and ascites puncture specimens, BAL, peritonial dialysate	Light microscopy after staining
CSF morphology	Cerebrospinal fluid	Light microscopy after staining
PAS	EDTA whole blood, bone marrow	Light microscopy after staining

Test area: Immunology

Type of test:
Flow cytometry**

Analyte (measurand)	Test material (matrix)	Test technique
Leukaemia typing	EDTA whole blood, bone marrow, cerebrospinal fluid, puncture	Immunophenotyping of haematopoietic cells
Lymphoma typing	EDTA whole blood, bone marrow, cerebrospinal fluid, puncture	Immunophenotyping of haematopoietic cells
Plasmocytoma (MM)	EDTA whole blood, bone marrow, cerebrospinal fluid, puncture	Immunophenotyping of haematopoietic cells

Department of Virology

Location: Sylter Straße 2, 13353 Berlin

Test area: Virology

Type of test:
Molecular biological tests (amplification procedures)**

Analyte (measurand)	Test material (matrix)	Test technique
Adenovirus	EDTA/citrate blood, stool, smear, aqueous fluid, urine, BAL, pharyngeal lavage fluid, sputum, cerebrospinal fluid	Sequence-specific detection (real-time PCR), quantitative
BK virus	Urine, EDTA/citrate plasma, serum, cerebrospinal fluid	Sequence-specific detection (real-time PCR), quantitative
CMV	Cerebrospinal fluid, BAL, EDTA/citrate plasma, serum, urine, amniotic fluid, saliva, dried blood,	Sequence-specific detection (real-time PCR), quantitative
EBV	EDTA/citrate blood or plasma, cerebrospinal fluid	Sequence-specific detection (real-time PCR), quantitative
Enterovirus (polio I-III, CoxA, CoxB, echo, enteroviruses including 70, 71)	Cerebrospinal fluid, stool, throat swab, pharyngeal lavage fluid, tissue	Sequence-specific detection (real-time PCR)
Hanta	EDTA plasma, serum, (urine)	Sequence-specific amplification, agarose electrophoresis
HAV	Stool, EDTA/citrate plasma, serum	Sequence-specific detection (real-time PCR)
HBV	EDTA/citrate plasma, serum	Sequence-specific detection (real-time PCR), quantitative
HCV	EDTA/citrate plasma, serum	Sequence-specific detection (real-time PCR), quantitative
HDV	EDTA/citrate plasma, serum	Sequence-specific detection (real-time PCR), quantitative
HEV	EDTA/citrate plasma, serum, stool	Sequence-specific detection (real-time PCR), quantitative
HHV6	Cerebrospinal fluid, swab, BAL, EDTA blood	Sequence-specific detection (real-time PCR), quantitative
HHV7	Cerebrospinal fluid, swab, BAL, EDTA blood	Sequence-specific detection (real-time PCR), quantitative
HHV 8	Saliva, EDTA/citrate blood, tissue	Sequence-specific detection (real-time PCR), quantitative
HIV-1	EDTA/citrate plasma	Sequence-specific detection (real-time PCR), quantitative

Analyte (measurand)	Test material (matrix)	Test technique
HIV-1 (proviral DNA)	EDTA/citrate blood	Sequence-specific detection (real-time PCR)
HIV-1 (resistance testing)	EDTA/citrate blood	Amplification, sequence analysis
HIV-1, HCV, HBV (organ donation)	EDTA/citrate plasma	Sequence-specific detection (real-time PCR)
HSV 1	Swab, cerebrospinal fluid, urine, biopsy specimen	Sequence-specific detection (real-time PCR)
HSV 2	Swab, cerebrospinal fluid, urine, biopsy specimen	Sequence-specific detection (real-time PCR)
Influenza virus A, B	Pharyngeal lavage fluid, respiratory secretion, nasal swab, BAL	Sequence-specific detection (real-time PCR)
JC virus	Cerebrospinal fluid, serum, EDTA/citrate blood, urine	Sequence-specific detection (real-time PCR), qualitative or quantitative
Measles virus	EDTA/citrate blood, cerebrospinal fluid, BAL, throat swab, respiratory secretions, urine	Sequence-specific detection (real-time PCR)
MPV	Swabs, BAL, pharyngeal lavage fluid	Sequence-specific detection (real-time PCR)
Mumps virus	Cerebrospinal fluid, saliva, swab the nose and throat	Sequence-specific detection (real-time PCR)
Neurotropic viruses: CMV, enterovirus, HSV1/2, HHV6, human parechovirus, VZV	Cerebrospinal fluid	Sequence-specific detection (multiplex real-time PCR)
Norovirus	Stool	Sequence-specific detection (real-time PCR)
Parvovirus B19	Serum, EDTA/citrate plasma, bone marrow, cerebrospinal fluid, pleural effusions, tissue	Sequence-specific detection (real-time PCR), quantitative
Respiratory viruses: AdV, coronavirus, enterovirus, hRhinovirus, hMPV, influenza A/B, parainfluenza 1-4, RSV	Respiratory material (secretion, swab, lavage fluid, BAL)	Sequence-specific detection (multiplex real-time PCR)
Respiratory viruses: Influenza A/B, RSV A/B, coronavirus (229E, HKU1; NL63, OC43, SARS-CoV-2), hMPV, rhinovirus, AdV, parainfluenza 1-4, human bocavirus	Swab from the nose and throat, BAL, respiratory secretions	Sequence-specific detection (multiplex real-time PCR)
Respiratory viruses: Influenza A/B, RSV	Nasopharyngeal swabs	Sequence-specific detection (multiplex real-time PCR)

Analyte (measurand)	Test material (matrix)	Test technique
Rhinovirus	Swab, BAL, pharyngeal lavage fluid	Sequence-specific detection (real-time PCR)
Rubella virus	Urine, throat swab, throat lavage fluid, amniotic fluid, cerebrospinal fluid, chorionic villus sampling, umbilical cord blood, biopsy	Sequence-specific detection (real-time PCR)
RSV	BAL, pharyngeal lavage fluid, respiratory secretion	Sequence-specific detection (real-time PCR)
SARS-CoV-2	Respiratory material, stool	Sequence-specific detection (real-time PCR), quantitative
SARS-CoV-2, mutant typing	Respiratory material	Sequence-specific detection (real-time PCR), quantitative
VZV	Cerebrospinal fluid, swab, BAL, EDTA/citrate blood, aqueous fluid	Sequence-specific detection (real-time PCR)

Type of test:
Molecular biological tests (hybridisation procedures)*

Analyte (measurand)	Test material (matrix)	Test technique
HCV (typing)	Serum, EDTA/citrate plasma	Hybridisation of amplification products

Type of test:
Ligand assays*

Analyte (measurand)	Test material (matrix)	Test technique
Adeno IgG/IgM	Serum	Enzyme immunoassay
CMV IgG/ IgG avidity/IgM	Serum	Immunoblot
CMV IgG/IgM	Serum	Chemiluminescence immunoassay
EBV IgG, IgM, IgA	Serum	Immunoblot
EBV: IgM, VCA IgG, EBNA IgG	Serum	Chemiluminescence immunoassay
Enterovirus IgA/IgG	Serum	Enzyme immunoassay
FSME virus IgG/IgM	Serum	Enzyme immunoassay
Hantavirus IgG/IgM: HTNV IgG/IgM, PUUV IgM/IgG, SEOV IgM/IgG, DOBV IgM/IgG, SNV IgM/IgG, SFV IgM/IgG	Serum	Immunoblot
HCV IgG	Serum	Immunoblot
HCV core antigen	Serum	Chemiluminescence immunoassay
HDV antibodies	Serum	Chemiluminescence immunoassay
HEV IgM/IgG	Serum	Enzyme immunoassay
HEV IgM/IgG	Serum	Immunoblot
HHV6 IgM/IgG	Serum	Enzyme immunoassay
HIV1/2 antibodies	Serum	Immunoblot

Analyte (measurand)	Test material (matrix)	Test technique
HSV1/2 IgG/IgM	Serum	Chemiluminescence immunoassay
HTLV1/2 antibodies	Serum	Chemiluminescence immunoassay
IgG index HSV1/2, VZV, TBE virus, measles virus mumps virus, rubella virus	Serum, cerebrospinal fluid	Enzyme immunoassay
Influenza A/B virus IgA	Serum	Enzyme immunoassay
Measles virus IgG/IgM	Serum	Chemiluminescence immunoassay
Mumps virus IgG/IgM	Serum	Chemiluminescence immunoassay
Parainfluenza virus IgA	Serum	Enzyme immunoassay
Parvovirus B12 IgM/IgG	Serum	Enzyme immunoassay
Rubella virus IgG/IgM	Serum	Chemiluminescence immunoassay
RSV IgA	Serum	Enzyme immunoassay
SARS-CoV-2 IgG IgA	Serum	Enzyme immunoassay
SARS-CoV-2 antibodies	Serum, plasma	Chemiluminescence immunoassay
VZV IgA	Serum	Enzyme immunoassay
VZV IgG IgM	Serum	Chemiluminescence immunoassay

Location: Campus Virchow-Klinikum, Augustenburger Platz 1, 13353 Berlin

Type of test:

Molecular biological tests (amplification procedures)**

Analyte (measurand)	Test material (matrix)	Test technique
SARS-CoV-2	Respiratory material	Sequence-specific detection (real-time PCR), quantitative

Department of Laboratory Medicine & Toxicology

Location: Sylter Straße 2, 13353 Berlin

Test area: Clinical chemistry

Type of test:
Spectrometry (photometry)**

Analyte (measurand)	Test material (matrix)	Test technique
Bromide	EDTA plasma/serum	Photometry
Lithium	EDTA plasma/serum	Photometry
Salicylic acid	EDTA plasma/serum	Photometry

Type of test:
Chromatography (gas chromatography (GC))**

Analyte (measurand)	Test material (matrix)	Test technique
Acetone	EDTA plasma/serum	GC headspace
Ethanol	EDTA plasma/serum	GC headspace
Isopropanol	EDTA plasma/serum	GC headspace
Methanol	EDTA plasma/serum	GC headspace

Type of test:
Chromatography (gas chromatography-mass spectrometry (GC-MS))**

Analyte (measurand)	Test material (matrix)	Test technique
THC-COOH	Urine	GC-MS

Type of test:
Chromatography (high performance liquid chromatography (HPLC))**

Analyte (measurand)	Test material (matrix)	Test technique
Clobazam	EDTA plasma/serum	HPLC-DAD
Norclobazam	EDTA plasma/serum	HPLC-DAD
Propofol	EDTA plasma/serum	HPLC fluorescence/DAD
Ethylene glycol	EDTA plasma/serum	HPLC-DAD
Diethylene glycol	EDTA plasma/serum	HPLC-DAD
Propylene glycol	EDTA plasma/serum	HPLC-DAD
Diazepam	EDTA plasma/serum	HPLC-DAD
Methohexital	EDTA plasma/serum	HPLC-DAD
Nordazepam	EDTA plasma/serum	HPLC-DAD
Pentobarbital	EDTA plasma/serum	HPLC-DAD
Toxicological HPLC search analysis	EDTA plasma/serum	HPLC-DAD
Doxylamine	EDTA plasma/serum	HPLC-DAD
Norclozapine	EDTA plasma/serum	HPLC-DAD
Doxepine	EDTA plasma/serum	HPLC-DAD
Oxazepam	EDTA plasma/serum	HPLC-DAD

Analyte (measurand)	Test material (matrix)	Test technique
Temazepam	EDTA plasma/serum	HPLC-DAD
Thiopental	EDTA plasma/serum	HPLC-DAD
Homocysteine	EDTA plasma/serum	HPLC fluorescence/DAD

Type of test:

Spectrometry (liquid chromatography-mass spectrometry / mass spectrometry (LC-MS/MS))**

Analyte (measurand)	Test material (matrix)	Test technique
Aciclovir	EDTA plasma/serum	LC-MS/MS
Ganciclovir	EDTA plasma/serum	LC-MS/MS
Atomoxetine	EDTA plasma/serum	LC-MS/MS
Methylphenidate	EDTA plasma/serum	LC-MS/MS
Mianserin	EDTA plasma/serum	LC-MS/MS
Reboxetine	EDTA plasma/serum	LC-MS/MS
Trazodone	EDTA plasma/serum	LC-MS/MS
Clonazepam	EDTA plasma/serum	LC-MS/MS
Clonazepam, amino	EDTA plasma/serum	LC-MS/MS
Fentanyl	EDTA plasma/serum	LC-MS/MS
Norfentanyl	EDTA plasma/serum	LC-MS/MS
Aminoflunitrazepam, 7-	EDTA plasma/serum	LC-MS/MS
Flunitrazepam	EDTA plasma/serum	LC-MS/MS
Norflunitrazepam	EDTA plasma/serum	LC-MS/MS
Hydromorphone	EDTA plasma/serum	LC-MS/MS
Midazolam	EDTA plasma/serum	LC-MS/MS
Oxycodone	EDTA plasma/serum	LC-MS/MS
Oxycodone, nor-	EDTA plasma/serum	LC-MS/MS
Pethidine	EDTA plasma/serum	LC-MS/MS
Piritramide	EDTA plasma/serum	LC-MS/MS
Remifentanil	EDTA plasma/serum	LC-MS/MS
Sulfentanil	EDTA plasma/serum	LC-MS/MS
Zolpidem	EDTA plasma/serum	LC-MS/MS
Zopiclone	EDTA plasma/serum	LC-MS/MS
10-OH-carbamazepine	EDTA plasma/serum	LC-MS/MS
Felbamate	EDTA plasma/serum	LC-MS/MS
Gabapentin	EDTA plasma/serum	LC-MS/MS
Lacosamide	EDTA plasma/serum	LC-MS/MS
Lamotrigine	EDTA plasma/serum	LC-MS/MS
Levetiracetam	EDTA plasma/serum	LC-MS/MS
Normesuximide	EDTA plasma/serum	LC-MS/MS
Pregabalin	EDTA plasma/serum	LC-MS/MS
Rufinamide	EDTA plasma/serum	LC-MS/MS
Sultiame	EDTA plasma/serum	LC-MS/MS
Vigabatrin	EDTA plasma/serum	LC-MS/MS
Aripirazole	EDTA plasma/serum	LC-MS/MS

Analyte (measurand)	Test material (matrix)	Test technique
Aripiprazole, dehydro-	EDTA plasma/serum	LC-MS/MS
Clozapine	EDTA plasma/serum	LC-MS/MS
Norclozapine	EDTA plasma/serum	LC-MS/MS
Haloperidol	EDTA plasma/serum	LC-MS/MS
Olanzapine	EDTA plasma/serum	LC-MS/MS
Norolanzapine	EDTA plasma/serum	LC-MS/MS
Quetiapine	EDTA plasma/serum	LC-MS/MS
Risperidone	EDTA plasma/serum	LC-MS/MS
9-OH-risperidone	EDTA plasma/serum	LC-MS/MS
Citalopram	EDTA plasma/serum	LC-MS/MS
Norcitalopram	EDTA plasma/serum	LC-MS/MS
Duloxetine	EDTA plasma/serum	LC-MS/MS
Fluoxetine	EDTA plasma/serum	LC-MS/MS
Norfluoxetine	EDTA plasma/serum	LC-MS/MS
Fluvoxamine	EDTA plasma/serum	LC-MS/MS
Mirtazapine	EDTA plasma/serum	LC-MS/MS
Normirtazapine	EDTA plasma/serum	LC-MS/MS
Paroxetine	EDTA plasma/serum	LC-MS/MS
Sertraline	EDTA plasma/serum	LC-MS/MS
Norsertraline	EDTA plasma/serum	LC-MS/MS
Venlafaxine	EDTA plasma/serum	LC-MS/MS
Norvenlafaxine	EDTA plasma/serum	LC-MS/MS
Amisulpride	EDTA plasma/serum	LC-MS/MS
Chlorprothixenes	EDTA plasma/serum	LC-MS/MS
Levomepromazine	EDTA plasma/serum	LC-MS/MS
Perazine	EDTA plasma/serum	LC-MS/MS
Pipamperone	EDTA plasma/serum	LC-MS/MS
Promethazine	EDTA plasma/serum	LC-MS/MS
Sertindole	EDTA plasma/serum	LC-MS/MS
Sulpiride	EDTA plasma/serum	LC-MS/MS
Thioridazine	EDTA plasma/serum	LC-MS/MS
Ziprasidone	EDTA plasma/serum	LC-MS/MS
Zotepine	EDTA plasma/serum	LC-MS/MS
Zuclopenthixol	EDTA plasma/serum	LC-MS/MS
Amitriptyline	EDTA plasma/serum	LC-MS/MS
Nortriptiline	EDTA plasma/serum	LC-MS/MS
Desimipramine	EDTA plasma/serum	LC-MS/MS
Doxepine	EDTA plasma/serum	LC-MS/MS
Nordoxepine	EDTA plasma/serum	LC-MS/MS
Imipramine	EDTA plasma/serum	LC-MS/MS
Clomipramine	EDTA plasma/serum	LC-MS/MS
Norclomipramine	EDTA plasma/serum	LC-MS/MS

Analyte (measurand)	Test material (matrix)	Test technique
Maprotiline	EDTA plasma/serum	LC-MS/MS
Normaprotiline	EDTA plasma/serum	LC-MS/MS
Trimipramine	EDTA plasma/serum	LC-MS/MS
Nortrimipramine	EDTA plasma/serum	LC-MS/MS
Acenocoumarol	EDTA plasma/serum	LC-MS/MS
brodifacoum	EDTA plasma/serum	LC-MS/MS
Bromadiolone	EDTA plasma/serum	LC-MS/MS
Coumachlor	EDTA plasma/serum	LC-MS/MS
Coumatetralyl	EDTA plasma/serum	LC-MS/MS
difenacoum	EDTA plasma/serum	LC-MS/MS
Difethialone	EDTA plasma/serum	LC-MS/MS
Flocoumafen	EDTA plasma/serum	LC-MS/MS
Phenprocoumon	EDTA plasma/serum	LC-MS/MS
Sulfaquinoxaline	EDTA plasma/serum	LC-MS/MS
Warfarin	EDTA plasma/serum	LC-MS/MS
Mycophenolic acid	EDTA plasma/serum	LC-MS/MS
Mycophenolic acid glucuronide	EDTA plasma/serum	LC-MS/MS
Ampicillin	EDTA plasma/serum	LC-MS/MS
Cefepime	EDTA plasma/serum	LC-MS/MS
Cefotaxime	EDTA plasma/serum	LC-MS/MS
Ceftazidime	EDTA plasma/serum	LC-MS/MS
Clindamycin	EDTA plasma/serum	LC-MS/MS
Levofloxacin	EDTA plasma/serum	LC-MS/MS
Meropenem	EDTA plasma/serum	LC-MS/MS
Piperacillin	EDTA plasma/serum	LC-MS/MS
Rifampicin	EDTA plasma/serum	LC-MS/MS
Sulbactam	EDTA plasma/serum	LC-MS/MS
Tazobactam	EDTA plasma/serum	LC-MS/MS
Imipenem	EDTA plasma/serum	LC-MS/MS
Methotrexate	EDTA plasma/serum	LC-MS/MS
7-OH-methotrexate	EDTA plasma/serum	LC-MS/MS
DAMPA	EDTA plasma/serum	LC-MS/MS
Naloxone	Urine	LC-MS/MS
Tilidine	Urine	LC-MS/MS
Tilidine, nor-	Urine	LC-MS/MS
Bisnortilidine	Urine	LC-MS/MS
Tramadol	Urine	LC-MS/MS
N-desmethyltramadol	Urine	LC-MS/MS
O-desmethyltramadol	Urine	LC-MS/MS
Ketamine	Urine	LC-MS/MS
Norketamine	Urine	LC-MS/MS
Benperidol	EDTA plasma/serum	LC-MS/MS

Analyte (measurand)	Test material (matrix)	Test technique
Biperiden	EDTA plasma/serum	LC-MS/MS
Bromoperidol	EDTA plasma/serum	LC-MS/MS
Droperidol	EDTA plasma/serum	LC-MS/MS
Fluphenazine	EDTA plasma/serum	LC-MS/MS
Flupentixol	EDTA plasma/serum	LC-MS/MS
Fluphenazine	EDTA plasma/serum	LC-MS/MS
Flupirtine	EDTA plasma/serum	LC-MS/MS
Fluspirilene	EDTA plasma/serum	LC-MS/MS
Levocetirizine	EDTA plasma/serum	LC-MS/MS
Perphenazine	EDTA plasma/serum	LC-MS/MS
Pimozide	EDTA plasma/serum	LC-MS/MS
Gilbenclamide	EDTA plasma/serum	LC-MS/MS
Glimepiride	EDTA plasma/serum	LC-MS/MS
Metformin	EDTA plasma/serum	LC-MS/MS
Nateglinide	EDTA plasma/serum	LC-MS/MS
Pioglitazone	EDTA plasma/serum	LC-MS/MS
Repaglinide	EDTA plasma/serum	LC-MS/MS
Gamma-hydroxy-butyric acid	Urine	LC-MS/MS
Gamma-hydroxy-butyric acid	EDTA plasma/serum	LC-MS/MS
Ethyl glucuronide	Urine	LC-MS/MS
Flucytosine	EDTA plasma/serum	LC-MS/MS
Fluconazole	EDTA plasma/serum	LC-MS/MS
Voriconazole	EDTA plasma/serum	LC-MS/MS
Itraconazole	EDTA plasma/serum	LC-MS/MS
OH-itraconazole	EDTA plasma/serum	LC-MS/MS
Posaconazole	EDTA plasma/serum	LC-MS/MS
Amiloride	Urine	LC-MS/MS
Bendroflumethiazide	Urine	LC-MS/MS
BHPM	Urine	LC-MS/MS
Bumetanide	Urine	LC-MS/MS
Canrenone	Urine	LC-MS/MS
Chlorothiazide	Urine	LC-MS/MS
Chlorthalidone	Urine	LC-MS/MS
Clopamide	Urine	LC-MS/MS
Furosemide	Urine	LC-MS/MS
Hydrochlorothiazide	Urine	LC-MS/MS
Indapamide	Urine	LC-MS/MS
Piretanide	Urine	LC-MS/MS
Rhein	Urine	LC-MS/MS
Torasemide	Urine	LC-MS/MS
Triamterene	Urine	LC-MS/MS
Xipamide	Urine	LC-MS/MS

Analyte (measurand)	Test material (matrix)	Test technique
Busulfan	EDTA plasma/serum	LC-MS/MS
Amprenavir	EDTA plasma/serum	LC-MS/MS
Atazanavir	EDTA plasma/serum	LC-MS/MS
Darunavir	EDTA plasma/serum	LC-MS/MS
Efavirenz	EDTA plasma/serum	LC-MS/MS
Elvitegravir	EDTA plasma/serum	LC-MS/MS
Etravirine	EDTA plasma/serum	LC-MS/MS
Lopinavir	EDTA plasma/serum	LC-MS/MS
Maraviroc	EDTA plasma/serum	LC-MS/MS
Nevirapine	EDTA plasma/serum	LC-MS/MS
Raltegravir	EDTA plasma/serum	LC-MS/MS
Rilpivirine	EDTA plasma/serum	LC-MS/MS
Ritonavir	EDTA plasma/serum	LC-MS/MS
Saquinavir	EDTA plasma/serum	LC-MS/MS
Colchicine	EDTA plasma/serum	LC-MS/MS
Colistin	EDTA plasma/serum	LC-MS/MS
Streptomycin	EDTA plasma/serum	LC-MS/MS
Amiodarone	EDTA plasma/serum	LC-MS/MS
Desethylamiodarone	EDTA plasma/serum	LC-MS/MS
Amlodipine	EDTA plasma/serum	LC-MS/MS
Verapamil	EDTA plasma/serum	LC-MS/MS
Norverapamil	EDTA plasma/serum	LC-MS/MS
Iohexol	Serum	LC-MS/MS

Type of test:

Ligand assays**

Analyte (measurand)	Test material (matrix)	Test technique
Amphetamines/ecstasy	Urine	KIMS
6-acetylmorphine	Urine	EIA
Barbiturates	Urine	KIMS
Benzodiazepine	Urine	KIMS
Buprenorphine	Urine	Cedia
Cannabinoids	Urine	DRI
Cannabinoids	Urine	Cedia
Cocaine	Urine	KIMS
EDDP	Urine	DRI
Ethyl glucuronide	Urine	DRI
LSD	Urine	Cedia
Opiates	Urine	KIMS
Acetaminophen	EDTA plasma/serum	EIA
Amikacin	EDTA plasma/serum	EIA
Carbamazepine	heparin plasma	EIA
Digitoxin	heparin plasma	EIA

Analyte (measurand)	Test material (matrix)	Test technique
Digoxin	heparin plasma	EIA
Gentamicin	heparin plasma	EIA
Gentamicin	EDTA plasma/serum	QMS
Gentamicin, children	Serum, heparin plasma	CEDIA
Phenobarbital	Serum	EIA
Phenytoin	Heparin plasma/serum	EIA
Theophylline	Serum	EIA
Teicoplanin	Serum	QMS
Tobramycin	EDTA, heparin plasma/serum	EIA
Topiramate	EDTA plasma/serum	EIA
Valproic acid	Heparin plasma/serum	EIA
Vancomycin	Heparin plasma/serum	EIA
Zonisamide	EDTA plasma/serum	QMS
Opiates	EDTA plasma/serum	Cedia
Creatinine	Urine	EIA
Ciclosporine	EDTA whole blood	EIA
Everolimus	EDTA whole blood	EIA
Sirolimus	EDTA whole blood	EIA
Tacrolimus	EDTA whole blood	EIA

Campus Benjamin Franklin (CBF)

Location: Hindenburgdamm 27, 12200 Berlin

Test area: Clinical chemistry

Type of test:

Spectrometry (photometry)*

Analyte (measurand)	Test material (matrix)	Test technique
Albumin	Heparin plasma, serum	Photometry (bromocresol green)
ALT (37°C)	Heparin plasma, serum	IFCC 37°C, with pyridoxal phosphate activation
Ammonia	EDTA plasma	Enzymatic method with GLDH
Anti-Xa activity NMH	Citrate plasma	Photometry (chromogenic substrate)
Anti-Xa activity UFH	Citrate plasma	Photometry (chromogenic substrate)
AP (37°C)	Heparin plasma, serum	IFCC 37°C, colour test
AST (37°C)	Heparin plasma, serum	IFCC 37°C, with pyridoxal phosphate activation
AT-III activity	Citrate plasma	Photometry (chromogenic substrate)
Bilirubin, conjugated	Heparin plasma, serum	Jendrassik diazo method
Bilirubin, total	Heparin plasma, serum	Photometry, DPD method
Calcium	Heparin plasma, serum	Colour test, o_cresolphthalein complexone
CK (37°C)	Heparin plasma, serum	NAC 37°C, kinetic UV test
CK-MB (37°C)	Heparin plasma, serum	UV test with immunological inhibition of CK-M
Cholesterol	Heparin plasma, serum	Enzymatic colour test (CHOD-PAP)
Cholesterol HDL	Heparin plasma, serum	Homogeneous enzymatic colour
Cholesterol LDL	Heparin plasma, serum	Homogeneous enzymatic colour
Ethanol	Heparin plasma, serum	Enzymatic method with ADH
GGT (37°C)	Heparin plasma, serum	Enzymatic colour test, 37°C
Glucose	Heparin plasma, serum, fluoride plasma	Photometric test with hexokinase
Glucose in cerebrospinal fluid	Cerebrospinal fluid	Photometric test with hexokinase
Haemoglobin	EDTA whole blood	Photometry (SLS method)
Uric acid	Heparin plasma, serum	Enzymatic colour test (Uricase_PAP)
Urea	Heparin plasma, serum	Enzymatic colour test (Urease_GLDH)
Creatinine	Heparin plasma, serum	Enzymatic colour test
Creatinine	Heparin plasma, serum	Kinetic colour test (Jaffé)

Analyte (measurand)	Test material (matrix)	Test technique
Lactate	Plasma (Na-fluoride, Na-oxalate)	Enzymatic colour test (lactate oxidase_peroxidase)
Lactate	Cerebrospinal fluid	Enzymatic colour test (lactate oxidase_peroxidase)
LDH (37°C)	Heparin plasma, serum	UV test, IFCC 37°C
Lipase	Heparin plasma, serum	Enzymatic colour test
Magnesium	Heparin plasma, serum	Photometry (xylidyl blue)
Phosphate, inorganic	Heparin plasma, serum	Photometry (phosphorus
ps cholinestrase (37°C)	Heparin plasma, serum	Kinetic test 37°C (butyrylthiocholine)
Protein, total	Heparin plasma, serum	Photometry (chromogenic substrate)
Serum indices	Heparin plasma, serum	Calculation of absorbance measurements at different wavelengths
Triglycerides	Heparin plasma, serum	Enzymatic colour test

Type of test:

Electrochemical tests *

Analyte (measurand)	Test material (matrix)	Test technique
Calcium, ionised	Heparinised whole blood (arterial, mixed venous, central venous, peripheral venous)	Potentiometry (ISE technology)
Chloride	Heparin plasma, serum	Indirect ISE
Chloride	Heparinised whole blood (arterial, mixed venous, central venous, peripheral venous)	Potentiometry (ISE technology)
CO-haemoglobin	Heparinised whole blood (arterial, mixed venous, central venous, peripheral venous)	Thick-film hybrid technology and solid-state design (sensor technology)
Glucose	Heparinised whole blood (arterial, mixed venous, central venous, peripheral venous)	Amperometry using enzyme electrodes and glucose oxidase
Potassium	Heparin plasma, serum	Indirect ISE
Potassium	Heparinised whole blood (arterial, mixed venous, central venous, peripheral venous)	Potentiometry (ISE technology)
Lactate	Heparinised whole blood (arterial, mixed venous, central venous, peripheral venous)	Amperometry
Met haemoglobin	Heparinised whole blood (arterial, mixed venous, central venous, peripheral venous)	Thick-film hybrid technology and solid-state design (sensor technology)
Sodium	Heparin plasma, serum	Indirect ISE
Sodium	Heparinised whole blood (arterial, mixed venous, central venous, peripheral venous)	Potentiometry (ISE technology)

Analyte (measurand)	Test material (matrix)	Test technique
pCO2	Heparinised whole blood (arterial, mixed venous, central venous, peripheral venous)	Modified potentiometry within the framework of the principles applicable to Severinghaus
p02	Heparinised whole blood (arterial, mixed venous, central venous, peripheral venous)	Amperometry within the framework of the principles applicable to Clark electrodes

Type of test:
Osmometry

Analyte (measurand)	Test material (matrix)	Test technique
Osmolality	Heparin plasma, serum	Freezing point depression

Type of test:
Spectrometry (turbidimetry/immunoturbidimetry)*

Analyte (measurand)	Test material (matrix)	Test technique
CRP	Heparin plasma, serum	Particle-enhanced immunological turbidity test
D-Dimer	Citrate plasma	Particle-enhanced immunological turbidity test
Ferritin	Heparin plasma, serum	Particle-enhanced immunological turbidity test
Protein in cerebrospinal fluid	Cerebrospinal fluid	Turbidimetry

Ligand assays*

Analyte (measurand)	Test material (matrix)	Test technique
Beta HCG	Serum, heparin plasma	ECLIA
Interleukin-6	Serum, heparin plasma	ECLIA
Free thyroxine	Serum, heparin plasma	ECLIA
Methotrexate	Serum, heparin plasma	Homogeneous immunoassay
Myoglobin	Serum, heparin plasma	ECLIA
NT-proBNP	Heparin plasma, serum	ECLIA
Parathyroid hormone, intact	EDTA plasma, serum	ECLIA
Procalcitonin	Serum, heparin/EDTA plasma	ECLIA
Triiodothyronine	Serum, heparin plasma	ECLIA
Troponin T	Heparin plasma, serum	ECLIA
TSH	Serum, heparin plasma	ECLIA

Type of test:
Spectrometry (reflectometry / carrier-bound methods of analysis)*

Analyte (measurand)	Test material (matrix)	Test technique
Bilirubin	Urine	Reflectometry (test strips)
Blood	Urine	Reflectometry (test strips)
Glucose	Urine	Reflectometry (test strips)
Ketone	Urine	Reflectometry (test strips)

Analyte (measurand)	Test material (matrix)	Test technique
Leukocytes	Urine	Reflectometry (test strips)
Nitrite	Urine	Reflectometry (test strips)
pH	Urine	Reflectometry (test strips)
Protein	Urine	Reflectometry (test strips)
Specific gravity	Urine	Reflectometry (test strips)
Urobilinogen	Urine	Reflectometry (test strips)

Type of test:

Coagulometry*

Analyte (measurand)	Test material (matrix)	Test technique
aPTT with Actin FS reagent	Citrate plasma	Coagulometry
aPTT	Citrate plasma	Coagulometry
Fibrinogen	Citrate plasma	Coagulometry
Factor IX	Citrate plasma	Coagulometry
Factor VIII	Citrate plasma	Coagulometry
TPZ value (quick)	Citrate plasma	Coagulometry

Type of test:

Flow cytometry (including particle property determination)*

Analyte (measurand)	Test material (matrix)	Test technique
Basophils	EDTA whole blood	Flow cytometry
Eosinophils	EDTA whole blood	Flow cytometry
Erythroblasts	EDTA whole blood	Flow cytometry
Erythrocytes	EDTA whole blood	Impedance measurement
Fragmentocytes	EDTA whole blood	Flow cytometry
Haematocrit	EDTA whole blood	Impedance measurement
Immature granulocytes	EDTA whole blood	Flow cytometry
Immature platelet fraction	EDTA whole blood	Flow cytometry
Leukocytes	EDTA whole blood	Flow cytometry and impedance
Lymphocytes	EDTA whole blood	Flow cytometry
MCH	EDTA whole blood	Calculated value
MCHC	EDTA whole blood	Calculated value
MCV	EDTA whole blood	Calculated value
Monocytes	EDTA whole blood	Flow cytometry
MPV	EDTA whole blood	Calculated value
Neutrophils	EDTA whole blood	Flow cytometry
Ret-He	EDTA whole blood	Flow cytometry
Reticulocytes	EDTA whole blood	Flow cytometry
RPI	EDTA whole blood	Calculated value
Thrombocytes	EDTA whole blood	Flow cytometry and impedance measurement

Analyte (measurand)	Test material (matrix)	Test technique
Thrombocytes	Citrated whole blood	Flow cytometry and impedance measurement
Thrombocytes	Thrombo-exact whole blood	Flow cytometry and impedance measurement
Cell count	Cerebrospinal fluid	Flow cytometry

Campus Virchow-Klinikum (CVK), Sylter Straße 2, 13353 Berlin

Location: Sylter Straße 2, 13353 Berlin

Test area: Human genetics (human molecular genetics)

Type of test:
Molecular biological analysis (amplification methods)**

Analyte (measurand)	Test material (matrix)	Test technique
Angiotensin converting enzyme gene (dbSNP rs1799752)	EDTA blood, citrate blood, iso. DNA	Real-Time PCR
Antitrypsin deficiency, hereditary-AAT_PI1_gene (1a antitrypsin proteinase inhibitor) (dbSNP	EDTA blood, citrate blood, iso. DNA	Real-Time PCR
Lipid metabolism disorder - Apo E (dbSNP rs7412, dbSNP rs429358	EDTA blood, citrate blood, iso. DNA	Real-Time PCR
Glycoprotein Ia 807 C>T (dbSNP rs1126643)	EDTA blood, citrate blood, iso. DNA	Real-Time PCR
Glycoprotein IIb IIIa L33P (dbSNP rs5918)	EDTA blood, citrate blood, iso. DNA	Real-Time PCR
Haemochromatosis gene C282Y, H63D (dbSNP rs1799945, dbSNP rs1800562)	EDTA blood, citrate blood, iso. DNA	Real-Time PCR
Meulengracht's disease, UDP-glycosyltransferase 1 family, polypeptide A1 (UGT1A1*28)	EDTA blood, citrate blood, iso. DNA	Real-Time PCR
Pharmacokinetics - thiopurine S-methyltransferase gene (dbSNP rs1800462, dbSNP rs1800460, dbSNP rs1142345)	EDTA blood, citrate blood, iso. DNA	Real-Time PCR
Thalassaemia genetic (alpha)	EDTA blood, citrate blood, iso. DNA	Multiplex GAP PCR
MLPA thalassaemia	EDTA blood, citrate blood, iso. DNA	MLPA
Thalassaemia genetic (beta)	EDTA blood, citrate blood, iso. DNA	Sanger sequencing
Thalassaemia genetic (alpha)	EDTA blood, citrate blood, iso. DNA	Sanger sequencing
Thalassaemia genetic (alpha)	EDTA blood, citrate blood, iso. DNA	Multiplex triple PCR
Thrombophilia - activating factor VII protease (FSAP) 1601 G>A (dbSNP	EDTA blood, citrate blood, iso. DNA	Real-Time PCR
Thrombophilia - factor II 20210 G>A (dbSNP rs1799963), factor V Leiden (dbSNP rs6025)	EDTA blood, citrate blood, iso. DNA	Real-Time PCR
Thrombophilia - factor VII R353Q (dbSNP rs6046)	EDTA blood, citrate blood, iso. DNA	Real-Time PCR
Thrombophilia - factor XII 46 C>T (dbSNP rs1801220)	EDTA blood, citrate blood, iso. DNA	Real-Time PCR
Thrombophilia - factor XIII V34L (dbSNP rs5985)	EDTA blood, citrate blood, iso. DNA	Real-Time PCR

Analyte (measurand)	Test material (matrix)	Test technique
Thrombophilia - fibrinogen alpha T312A (dbSNP rs6050)	EDTA blood, citrate blood, iso. DNA	Real-Time PCR
Thrombophilia - fibrinogen beta - 455 G>A (dbSNP rs1800790)	EDTA blood, citrate blood, iso. DNA	Real-Time PCR
Thrombophilia - plasminogen activator inhibitor 1 (PAI_1) gene, 4G/5G (dbSNP rs1799889)	EDTA blood, citrate blood, iso. DNA	Real-Time PCR
Thrombophilia - tissue type plasminogen activator (T_PA), Intron h Del/Ins (dbSNP rs4646972)	EDTA blood, citrate blood, iso. DNA	Real-Time PCR
Thrombophilia / hyperhomocysteinaemia - methylenetetrahydrofolate reductase - gene 677 C>T (dbSNP rs1801133)	EDTA blood, citrate blood, iso. DNA	Real-Time PCR
CYP2C9 genotype (dbSNP	EDTA blood, citrate blood, iso. DNA	Real-Time PCR
CYP2C19 genotype (dbSNP	EDTA blood, citrate blood, iso. DNA	Real-Time PCR
VKORC 1 (dbSNP rs9934438)	EDTA blood, citrate blood, iso. DNA	Real-Time PCR
ABCB1 (dbSNP rs2032583, dbSNP rs2235015)	EDTA blood, citrate blood, iso. DNA; dried blood	Real-Time PCR
Lactose intolerance test (dbSNP rs4988235)	EDTA blood	Real-Time PCR

Test area: Clinical chemistry

Type of test:

Agglutination tests

Analyte (measurand)	Test material (matrix)	Test technique
vWF: Ristocetin cofactor activity	Citrate plasma	Ristocetin-mediated agglutination, turbidimetric

Type of test:

Aggregometry*

Analyte (measurand)	Test material (matrix)	Test technique
Thrombocyte aggregation (ADP, ASPI, TRAP)	Whole blood	Impedance aggregometry

Type of test:

Spectrometry (photometry)*

Analyte (measurand)	Test material (matrix)	Test technique
5-aminolevulinic acid	Timed urine sample, spot urine	Photometry
ACE	Serum, heparin plasma	Enzymatic test
Albumin	Heparin plasma, serum	Photometry (bromocresol green)
ALT	Heparin plasma, serum	IFCC 37°C, with pyridoxal phosphate activation

Analyte (measurand)	Test material (matrix)	Test technique
Alpha 2-antiplasmin	Citrate plasma	Photometry (chromogenic substrate)
Ammonia	EDTA plasma	Enzymatic method with GLDH
Amylase	Heparin plasma, serum	Enzymatic colour test (IFCC)
Amylase	Timed urine sample	Enzymatic colour test (IFCC)
Anti-Xa activity (NMH)	Citrate plasma	Photometry (chromogenic substrate)
Anti-Xa activity (UFH)	Citrate plasma	Photometry (chromogenic substrate)
Anti-Xa activity (FPX)	Citrate plasma	Photometry (chromogenic substrate)
AP	Heparin plasma, serum	IFCC 37°C, colour test
AST	Heparin plasma, serum	IFCC 37°C, with pyridoxal phosphate activation
AT-III activity	Citrate plasma	Photometry
Bilirubin, conjugated	Heparin plasma, serum	Jendrassik diazo method
Bilirubin, total	Heparin plasma, serum	Photometry, DPD method
Calcium	Heparin plasma, serum	Colour test, o_cresolphthalein complexone
Calcium	Timed urine sample (stabilised)	Colour test, o_cresolphthalein complexone
Cholesterol	Heparin plasma, serum	Enzymatic colour test (CHOD-PAP)
Cholesterol - HDL	Heparin plasma, serum	Homogeneous enzymatic colour test
Cholesterol - LDL	Heparin plasma, serum	Homogeneous enzymatic colour test
CK	Heparin plasma, serum	NAC 37°C, kinetic UV test
CK-MB	Heparin plasma, serum	UV test with immunological inhibition
Iron	Heparin plasma, serum	Photometry (ferrozine)
Ethanol	Heparin plasma, serum	Enzymatic method with ADH
GGT	Heparin plasma, serum	Enzymatic colour test, 37°C
GLDH	Heparin plasma, serum	UV test (standardised)
Glucose	Heparin plasma, serum, fluoride plasma	Photometric test with hexokinase
Glucose	Timed urine sample	Photometric test with hexokinase
Glucose	Cerebrospinal fluid	Photometric test with hexokinase
Haemoglobin	EDTA whole blood	Photometry (SLS method)
Uric acid	Heparin plasma, serum	Enzymatic colour test (Uricase_PAP)
Uric acid	Urine	Enzymatic colour test (Uricase_PAP)
Urea	Heparin plasma, serum	Enzymatic colour test (Urease_GLDH)
Urea	Urine	Enzymatic colour test (Urease_GLDH)
Homocysteine	EDTA plasma	Enzymatic test (NADH)
Creatinine	heparin plasma	Enzymatic colour test
Creatinine	Heparin plasma, serum	Kinetic colour test (Jaffé)
Creatinine	Urine	Kinetic colour test (Jaffé)

Analyte (measurand)	Test material (matrix)	Test technique
Creatinine	Timed urine sample	Kinetic colour test (Jaffé)
Creatinine	Timed urine sample (stabilised)	Kinetic colour test (Jaffé)
Lactate	Plasma (Na-fluoride, Na-oxalate)	Enzymatic colour test (lactate oxidase_peroxidase)
Lactate	Cerebrospinal fluid	Enzymatic colour test (lactate oxidase_peroxidase)
Lithium	Heparin plasma, serum, EDTA plasma	Colour test
LDH	Heparin plasma, serum	UV test, IFCC 37°C
Lipase	Heparin plasma, serum	Enzymatic colour test
Magnesium	Heparin plasma, serum	Photometry (xylidyl blue)
Magnesium	Urine	Photometry (xylidyl blue)
Mycophenolic acid	Serum, heparin plasma	Enzymatic test (NADH)
Phosphorus (inorganic)	Heparin plasma, serum	Photometry (phosphorus molybdate)
Phosphorus (inorganic)	Urine	Photometry (phosphorus molybdate)
Plasminogen activity	Citrate plasma	Photometry (chromogenic substrate)
Protein	Heparin plasma, serum	Photometry (Biuret)
Pseudo-choline sterase	Heparin plasma, serum	Photometry
Salicylate	Heparin plasma, serum	Enzymatic test (NADH)
Serum indices	Heparin plasma, serum	Calculation of absorbance measurements at different
Triglycerides	Heparin plasma, serum	Enzymatic colour test (CHOD-PAP)
Tobramycin	Heparin plasma, serum	Photometric (homogeneous enzyme immunoassay)
Valproic acid	Heparin plasma, serum	Photometric
Vancomycin	Heparin plasma, serum	KIMS

Type of test:
Electrochemical tests *

Analyte (measurand)	Test material (matrix)	Test technique
Calcium, ionised	Heparinised whole blood (arterial, mixed venous, central venous, peripheral venous)	Potentiometry (ISE technology)
Chloride	Heparin plasma, serum	Indirect ISE
Chloride	Urine, timed urine sample	Indirect ISE
Chloride	Heparinised whole blood (arterial, mixed venous, central venous, peripheral venous)	Potentiometry (ISE technology)
CO-haemoglobin	Heparinised whole blood (arterial, mixed venous, central venous, peripheral venous)	Thick-film hybrid technology and solid-state design (sensor technology)

Analyte (measurand)	Test material (matrix)	Test technique
Glucose	Heparinised whole blood (arterial, mixed venous, central venous, peripheral venous)	Amperometry using enzyme electrodes and glucose oxidase
Potassium	Heparin plasma, serum	Indirect ISE
Potassium	Urine, timed urine sample	Indirect ISE
Potassium	Heparinised whole blood (arterial, mixed venous, central venous, peripheral venous)	Potentiometry (ISE technology)
Lactate	Heparinised whole blood (arterial, mixed venous, central venous, peripheral venous)	Amperometry
Met haemoglobin	Heparinised whole blood (arterial, mixed venous, central venous, peripheral venous)	Thick-film hybrid technology and solid-state design (sensor technology)
Sodium	Heparin plasma, serum	Indirect ISE
Sodium	Urine, timed urine sample	Indirect ISE
Sodium	Heparinised whole blood (arterial, mixed venous, central venous, peripheral venous)	Potentiometry (ISE technology)
pCO2	Heparinised whole blood (arterial, mixed venous, central venous, peripheral venous)	Modified potentiometry within the framework of the principles applicable to Severinghaus electrodes
p02	Heparinised whole blood (arterial, mixed venous, central venous, peripheral venous)	Amperometry within the framework of the principles applicable to Clark electrodes
pH	Heparinised whole blood (arterial, mixed venous, central venous, peripheral venous)	Potentiometry (ISE technology)

Type of test:

Electrophoresis*

Analyte (measurand)	Test material (matrix)	Test technique
Serum protein	Serum	Capillary zone electrophoresis

Type of test:

Osmometry*

Analyte (measurand)	Test material (matrix)	Test technique
Osmolality	Heparin plasma, serum	Freezing point depression
Osmolality	Urine	Freezing point depression

Type of test:

Spectrometry (nephelometry)*

Analyte (measurand)	Test material (matrix)	Test technique
Albumin	Urine, 24-hour urine collection	Nephelometry
Albumin (Reiber diagnostics)	Serum, cerebrospinal fluid	Nephelometry
Alpha -1-microglobulin	Urine, 24-hour urine collection	Nephelometry
Alpha-2-macroglobulin	Serum	Nephelometry
Beta trace protein	Serum	Nephelometry
Beta trace protein	Nasal-ear secretion	Nephelometry
Beta trace protein	Cerebrospinal fluid	Nephelometry

Type of test:

Spectrometry (turbidimetry/immunoturbidimetry)*

Analyte (measurand)	Test material (matrix)	Test technique
Alpha-1-antitrypsin	Serum, heparin plasma	Immunological turbidity test
Apolipoprotein A1	Heparin plasma, serum	Immunoturbidimetry
Apolipoprotein B	Heparin plasma, serum	Immunoturbidimetry
Antistreptolysin O	Immunoturbidimetry	Immunoturbidimetry
Beta-2-microglobulin	Serum, heparin plasma	Particle-enhanced immunoturbidimetry
Carbamazepine	Heparin plasma, serum	Homogeneous microparticle agglutination immunoassay
CDT	Serum	Particle-enhanced competitive immunoassay
Caeruloplasmin	Serum, heparin plasma	Immunoturbidimetry
CRP	Heparin plasma, serum	Particle-enhanced immunological turbidity test
Cystatin C	Serum, Li-heparin plasma	Particle-enhanced immunological turbidity test
D-Dimer	Citrate plasma	Turbidimetry
Ferritin	Heparin plasma, serum	Particle-enhanced immunological turbidity test
Haptoglobin	Heparin plasma, serum	Immunological turbidity test
Lipoprotein (a)	Serum, heparin plasma	Immunological turbidity test
Soluble transferrin receptor	Heparin plasma, serum	Immunoturbidimetry
Protein in cerebrospinal fluid	Cerebrospinal fluid	Turbidimetry
Protein in urine	Urine	Turbidimetry
Acid alpha-1-glycoprotein	Serum, heparin plasma	Immunological turbidity test
Transferrin	Heparin plasma, serum	Immunological turbidity test
Transferrin saturation	Heparin plasma, serum	Calculated value
Von Willebrand factor antigen (vWF: Antigen	Citrate plasma	Particle-enhanced immunological turbidity test

Type of test:

Ligand assays*

Analyte (measurand)	Test material (matrix)	Test technique
AFP	Serum, heparin plasma	ECLIA
Amikacin	Serum, heparin plasma	KIMS
Beta HCG	Serum, heparin plasma	ECLIA
CA 15-3	Serum, heparin plasma	ECLIA
CA 19-9	Serum, heparin plasma	ECLIA
CA 72-4	Serum, heparin plasma	ECLIA
CA 125	Serum, heparin plasma	ECLIA
CEA	Serum, heparin plasma	ECLIA
Calprotectin	Stool	CLIA
Copeptin per AVP	Serum, heparin plasma, EDTA plasma	TRACE
Cortisol	Serum, heparin plasma	ECLIA
Cyfra-21-1	Heparin plasma, serum	ECLIA
Digitoxin	Serum, heparin plasma	ECLIA
Digoxin	Serum, heparin plasma	ECLIA
Estradiol	Serum, heparin plasma	ECLIA
Elastase-1	Stool	CLIA
Folic acid	Serum, heparin plasma	ECLIA
FSH	Serum, heparin plasma	ECLIA
Gentamicin	Serum, heparin plasma	KIMS
HE4	Serum, heparin plasma, EDTA plasma	ECLIA
Luteinising hormone	Serum, heparin plasma	ECLIA
Methotrexate	Serum, heparin plasma	Homogeneous immunoassay
MR ProANP	Serum, heparin plasma, EDTA plasma	TRACE
Myoglobin	Serum, heparin plasma	ECLIA
NSE	Serum	ECLIA
NT-proBNP	heparin plasma	ECLIA
Parathyroid hormone, intact	EDTA plasma, serum	ECLIA
Phenobarbital	Heparin plasma, serum	KIMS
Phenytoin	Heparin plasma, serum	KIMS
Procalcitonin	Serum, heparin/EDTA plasma	ECLIA
Progesterone	Heparin plasma, serum	ECLIA
Protein S concentration total	Citrate plasma	Enzyme immunoassay
Protein S concentration free	Citrate plasma	Enzyme immunoassay
Protein C activity	Citrate plasma	Enzyme immunoassay
PSA	Serum, heparin plasma	ECLIA
PSA, free	Serum, heparin plasma	ECLIA
SCC	Serum, heparin plasma	ECLIA
S100	Serum, cerebrospinal fluid	ECLIA
Theophylline	Heparin plasma, serum	KIMS
Thyroperoxidase antibody	Heparin plasma, serum	ECLIA
Thyroxine	Heparin plasma, serum	ECLIA

Analyte (measurand)	Test material (matrix)	Test technique
Thyroxine, free	Heparin plasma, serum	ECLIA
Triiodothyronine	Heparin plasma, serum	ECLIA
Triiodothyronine, free	Heparin plasma, serum	ECLIA
Troponin T	heparin plasma	ECLIA
TSH	Heparin plasma, serum	ECLIA
Vitamin B12	Heparin plasma, serum	ECLIA
Vitamin B12 - active (Holo TC)	Heparin plasma, serum	ECLIA
vWF: Collagen binding activity	Citrate plasma	Enzyme immunoassay

Type of test:

Reflectometry / carrier-based methods of analysis*

Analyte (measurand)	Test material (matrix)	Test technique
Bilirubin	Urine	Reflectometry (test strips)
Blood	Urine	Reflectometry (test strips)
Glucose	Urine	Reflectometry (test strips)
Ketone	Urine	Reflectometry (test strips)
Leukocytes	Urine	Reflectometry (test strips)
Nitrite	Urine	Reflectometry (test strips)
pH	Urine	Reflectometry (test strips)
Protein	Urine	Reflectometry (test strips)
Urobilinogen	Urine	Reflectometry (test strips)
Spec. weight	Urine	Reflectometry (test strips)

Type of test:

Coagulometry*

Analyte (measurand)	Test material (matrix)	Test technique
Apixaban	Citrate plasma	Coagulometry
APC resistance	Citrate plasma	Coagulometry
aPTT with Actin FS reagent	Citrate plasma	Coagulometry
aPTT	Citrate plasma	Coagulometry
Dabigatran	Citrate plasma	Stago/Roche liquid anti-Xa
Factor II	Citrate plasma	Coagulometry
Factor V	Citrate plasma	Coagulometry
Factor VII	Citrate plasma	Coagulometry
Factor VIII, activity notation!!!	Citrate plasma	Coagulometry
Factor VIII, inhibitor	Citrate plasma	Coagulometry
Factor IX	Citrate plasma	Coagulometry
Factor X	Citrate plasma	Coagulometry
Factor XI	Citrate plasma	Coagulometry
Factor XII	Citrate plasma	Coagulometry
Factor XIII	Citrate plasma	Coagulometry
Fibrinogen	Citrate plasma	Coagulometry

Analyte (measurand)	Test material (matrix)	Test technique
Inhibitor PTT inhibitor screening	Citrate plasma	Coagulometry
Lupus anticoagulant	Citrate plasma	Coagulometry
Protein C	Citrate plasma	Coagulometry
Protein S	Citrate plasma	Coagulometry
Rivaroxaban	Citrate plasma	Stago/Roche liquid anti-Xa
TPZ value (quick)	Citrate plasma	Coagulometry, mechanical

Type of test:

Flow cytometry (including particle property determination)*

Analyte (measurand)	Test material (matrix)	Test technique
Basophils	EDTA whole blood	Flow cytometry
Eosinophils	EDTA whole blood	Flow cytometry
Erythroblasts	EDTA whole blood	Flow cytometry
Erythrocytes	EDTA whole blood	Impedance measurement
Fragmentocytes	EDTA whole blood	Flow cytometry
Haematocrit	EDTA whole blood	Impedance measurement
Immature granulocytes	EDTA whole blood	Flow cytometry
Immature platelet fraction	EDTA whole blood	Flow cytometry
Leukocytes	EDTA whole blood	Flow cytometry and impedance measurement
Lymphocytes	EDTA whole blood	Flow cytometry
MCH	EDTA whole blood	Calculated value
MCHC	EDTA whole blood	Calculated value
MCV	EDTA whole blood	Calculated value
Monocytes	EDTA whole blood	Flow cytometry
MPV	EDTA whole blood	Calculated value
Neutrophils	EDTA whole blood	Flow cytometry
Ret-He	EDTA whole blood	Flow cytometry
Reticulocytes	EDTA whole blood	Flow cytometry
RPI	EDTA whole blood	Calculated value
Thrombocytes	EDTA whole blood	Flow cytometry and impedance measurement
Thrombocytes	Citrated whole blood	Flow cytometry and impedance measurement
Thrombocytes	Thrombo-exact whole blood	Flow cytometry and impedance measurement
Cell count	Cerebrospinal fluid	Flow cytometry
Erythrocytes	Urine	Flow cytometry
Hyaline cylinder	Urine	Flow cytometry
Crystals	Urine	Flow cytometry
Leukocytes	Urine	Flow cytometry
Leukocyte conglomerate	Urine	Flow cytometry
Non-plate epithelia	Urine	Flow cytometry
Squamous epithelia	Urine	Flow cytometry
Pathological cylinders	Urine	Flow cytometry
Mucus	Urine	Flow cytometry
Sperm	Urine	Flow cytometry

Type of test:

Microscopy*

Analyte (measurand)	Test material (matrix)	Test technique
Atypical cells	EDTA whole blood	Microscopic differentiation of smear preparation after Pappenheim staining
Basophils	EDTA whole blood	Microscopic differentiation of smear preparation after Pappenheim staining
Blasts	EDTA whole blood	Microscopic differentiation of smear preparation after Pappenheim staining
Eosinophils	EDTA whole blood	Microscopic differentiation of smear preparation after Pappenheim staining
Erythroblasts	EDTA whole blood	Microscopic differentiation of smear preparation after Pappenheim staining
Erythrocyte morphology	EDTA whole blood	Microscopic differentiation of smear preparation after Pappenheim staining
Core shadow	EDTA whole blood	Microscopic differentiation of smear preparation after Pappenheim staining
Leukocyte morphology	EDTA whole blood	Microscopic differentiation of smear preparation after Pappenheim staining
Lymphocytes	EDTA whole blood	Microscopic differentiation of smear preparation after Pappenheim staining
Lymphocytes, abnormal	EDTA whole blood	Microscopic differentiation of smear preparation after Pappenheim staining
Lymphocytes, reactive	EDTA whole blood	Microscopic differentiation of smear preparation after Pappenheim staining
Metamyelocytes	EDTA whole blood	Microscopic differentiation of smear preparation after Pappenheim staining
Monocytes	EDTA whole blood	Microscopic differentiation of smear preparation after Pappenheim staining
Myelocytes	EDTA whole blood	Microscopic differentiation of smear preparation after Pappenheim staining

Analyte (measurand)	Test material (matrix)	Test technique
Plasma cells	EDTA whole blood	Microscopic differentiation of smear preparation after Pappenheim staining
Promyelocytes	EDTA whole blood	Microscopic differentiation of smear preparation after Pappenheim staining
Segmented	EDTA whole blood	Microscopic differentiation of smear preparation after Pappenheim staining
Sezary cells	EDTA whole blood	Microscopic differentiation of smear preparation after Pappenheim staining
Rod core	EDTA whole blood	Microscopic differentiation of smear preparation after Pappenheim staining
Thrombocyte morphology	EDTA whole blood	Microscopic differentiation of smear preparation after Pappenheim staining

Type of test:
High performance liquid chromatography (HPLC)*

Analyte (measurand)	Test material (matrix)	Test technique
HbA1c	EDTA whole blood	HPLC - photometric detection
Haemoglobin A2	EDTA whole blood	HPLC - photometric detection
Haemoglobin A	EDTA whole blood	HPLC - photometric detection
Haemoglobin C	EDTA whole blood	HPLC - photometric detection
Haemoglobin D	EDTA whole blood	HPLC - photometric detection
Haemoglobin E	EDTA whole blood	HPLC - photometric detection
Haemoglobin F	EDTA whole blood	HPLC - photometric detection
Haemoglobin sickle cell_Hb	EDTA whole blood	HPLC - photometric detection
5-HIES	24-hour urine collection (stabilised)	High pressure liquid chromatography with electrochemical detection
Homovanillic acid	24-hour urine collection (stabilised)	High pressure liquid chromatography with electrochemical detection
Catecholamines in urine adrenalin, noradrenalin,	24-hour urine collection (stabilised)	High pressure liquid chromatography with electrochemical detection

Analyte (measurand)	Test material (matrix)	Test technique
Porphobilinogen	24-hour urine collection	Liquid chromatography (column test) with subsequent photometric measurement
Porphyrins in urine: uroporphyrin, heptacarboxyporphyrin, hexacarboxyporphyrin, pentacarboxyporphyrin, coproporphyrin I, coproporphyrin III, total porphyrins	24-hour urine collection	High pressure liquid chromatography with fluorescence detection
Vanillylmandelic acid	24-hour urine collection	High pressure liquid chromatography with electrochemical detection
Vitamin A	Serum	High pressure liquid chromatography with UV detection
Vitamin B1/vitamin B6 (combi)	EDTA whole blood	High pressure liquid chromatography with fluorescence detection
Vitamin B6	Serum	High pressure liquid chromatography with fluorescence detection
Vitamin E	Serum	High pressure liquid chromatography with UV detection

Type of test:

Titration

Analyte (measurand)	Test material (matrix)	Test technique
Chloride in perspiration	Perspiration	Coulometric titration

Test area: Immunology

Type of test:

Electrophoresis

Analyte (measurand)	Test material (matrix)	Test technique
Immunofixation in serum IgG heavy chain IgA heavy chain IgM heavy chain Kappa light chain Lambda light chain	Serum	Immunofixation
Immunofixation in urine Bence-Jones protein	24-hour urine	Immunofixation
IgG (oligoclonal bands)	Serum and cerebrospinal fluid	Isoelectric focusing

Type of test:

Spectrometry (immunoturbidimetry)*

Analyte (measurand)	Test material (matrix)	Test technique
Immunoglobulin A	Heparin plasma, serum	Immunoturbidimetry
Immunoglobulin G	Heparin plasma, serum	Immunoturbidimetry
Immunoglobulin G	Urine	Immunoturbidimetry
Immunoglobulin G1	Serum	Immunoturbidimetry
Immunoglobulin G2	Serum	Immunoturbidimetry
Immunoglobulin G3	Serum	Immunoturbidimetry
Immunoglobulin G4	Serum	Immunoturbidimetry
Immunoglobulin M	Heparin plasma, serum	Immunoturbidimetry
C3 complement	Heparin plasma, serum	Immunoturbidimetry
C4 complement	Heparin plasma, serum	Immunoturbidimetry

Type of test:

Spectrometry (nephelometry)*

Analyte (measurand)	Test material (matrix)	Test technique
Immunoglobulin A (Reiber diagnostics)	Serum, cerebrospinal fluid	Nephelometry
Immunoglobulin G (Reiber diagnostics)	Serum, cerebrospinal fluid	Nephelometry
Immunoglobulin M (Reiber diagnostics)	Serum, cerebrospinal fluid	Nephelometry

Type of test:

Ligand assays*

Analyte (measurand)	Test material (matrix)	Test technique
Immunoglobulin E	Heparin plasma, serum	ECLIA
Interleukin-6	Heparin plasma, serum	ECLIA
Thyroglobulin, human	Serum, heparin/EDTA plasma	TRACE
Thyroglobulin antibody	Heparin plasma, serum	ECLIA

Type of test:

Spectrometry (photometry)*

Analyte (measurand)	Test material (matrix)	Test technique
C1 esterase inhibitor activity	Citrate plasma	Photometry (chromogenic substrate)
Free kappa light chains	Heparin plasma, serum	Kinetic test
Free lambda light chains	Heparin plasma, serum	Kinetic test

Test area: Microbiology

Type of test:
Spectrometry (turbidimetry)*

Analyte (measurand)	Test material (matrix)	Test technique
Anti-treponema pallidum (TPLA)	Serum	Turbidity measurement

Type of test:
Flow cytometry (including particle property determination)*

Analyte (measurand)	Test material (matrix)	Test technique
Bacteria	Urine	Flow cytometry
Yeasts	Urine	Flow cytometry

Type of test:
Microscopy

Analyte (measurand)	Test material (matrix)	Test technique
Plasmodium spec. (malaria pathogen)	Thick blood film, EDTA whole blood	Light microscopy

Test area: Virology

Type of test:
Ligand assays*

Analyte (measurand)	Test material (matrix)	Test technique
CMV IgG antibodies	Serum, heparin plasma	ECLIA
Anti-HAV IgM	Serum, Li/Na heparin, K2 EDTA, K3 EDTA, Na citrate plasma	ECLIA
Anti-HAV IgG	Serum, Li/Na heparin, K2 EDTA, K3 EDTA, Na citrate plasma	ECLIA
Anti-HBc IgG	Serum, Li/Na heparin, K2 EDTA, K3 EDTA, Na citrate plasma	ECLIA
Anti-HBc IgM	Serum, Li/Na heparin, K2 EDTA, K3 EDTA, Na citrate plasma	ECLIA
Anti-HBe	Serum, Li/Na heparin, K2 EDTA, K3 EDTA, Na citrate plasma	ECLIA

Analyte (measurand)	Test material (matrix)	Test technique
Anti-HBs	Serum, Li/Na heparin, K2 EDTA, K3 EDTA, Na citrate plasma	ECLIA
HBe-Ag	Serum, Li/Na heparin, K2 EDTA, K3 EDTA, Na citrate plasma	ECLIA
HBs-Ag	Serum, Li/Na heparin, K2 EDTA, K3 EDTA, Na citrate plasma	ECLIA
Hepatitis C: Anti-HCV	Serum, Li/Na heparin, K2 EDTA, K3 EDTA, Na citrate plasma	ECLIA
HIV (HIV duo test): covering HIV-p25Ag, antibodies against HIV1, including group O and HIV2)	Li heparin, Na heparin, K2-EDTA, K3-EDTA, ACD, CPD, CP2D, CPDA and Na citrate plasma	ECLIA

Campus Charité Mitte (CCM)

Location: Chariteplatz 1, 10117 Berlin

Test area: Clinical chemistry

Type of test:

Spectrometry (photometry)*

Analyte (measurand)	Test material (matrix)	Test technique
Albumin	Heparin plasma, serum	Photometry (bromocresol green)
ALT	Heparin plasma, serum	IFCC 37°C, with pyridoxal phosphate activation
Alpha 2-antiplasmin	Citrate plasma	Photometry (chromogenic substrate)
Ammonia	EDTA plasma	Photometry (chromogenic substrate)
Anti-Xa activity NMH	Citrate plasma	Photometry (chromogenic substrate)
Anti-Xa activity UFH	Citrate plasma	Photometry (chromogenic substrate)
AP	Heparin plasma, serum	IFCC 37°C, colour test
AST	Heparin plasma, serum	IFCC 37°C, with pyridoxal phosphate activation
AT-III activity	Citrate plasma	Photometry (chromogenic substrate)
Bilirubin, conjugated	Heparin plasma, serum	Jendrassik diazo method
Bilirubin, total	Heparin plasma, serum	Photometry, DPD method
Calcium	Heparin plasma, serum	Colour test, o_cresolphthalein complexone
CK	Heparin plasma, serum	NAC 37°C, kinetic UV test
CK-MB	Heparin plasma, serum	UV test with immunological inhibition of CK-M
Cholesterol	Heparin plasma, serum	Enzymatic colour test (CHOD-PAP)
Cholesterol HDL	Heparin plasma, serum	Homogeneous enzymatic colour test
Cholesterol LDL	Heparin plasma, serum	Homogeneous enzymatic colour test
Ethanol	Heparin plasma, serum	Enzymatic method with ADH
GGT	Heparin plasma, serum	Enzymatic colour test, 37°C
Glucose	Heparin plasma, serum, fluoride plasma	Photometric test with hexokinase
Glucose	Cerebrospinal fluid	Photometric test with hexokinase
Haemoglobin	EDTA whole blood	Photometry (SLS method)
Uric acid	Heparin plasma, serum	Enzymatic colour test (Uricase_PAP)
Urea	Heparin plasma, serum	Enzymatic colour test (Urease_GLDH)

Analyte (measurand)	Test material (matrix)	Test technique
Homocysteine	EDTA plasma, serum	Enzymatic colour test (NADH)
Creatinine	Heparin plasma, serum	Enzymatic colour test
Creatinine	Heparin plasma, serum	Kinetic colour test (Jaffé)
Lactate	Plasma (Na-fluoride, Na-oxalate)	Enzymatic colour test (lactate oxidase_peroxidase)
Lactate	Cerebrospinal fluid	Enzymatic colour test (lactate oxidase_peroxidase)
LDH	Heparin plasma, serum	UV test, IFCC 37°C
Lipase	Heparin plasma, serum	Enzymatic colour test
Magnesium	Heparin plasma, serum	Photometry (xylidyl blue)
Plasminogen activity	Heparin plasma, serum	Photometry (chromogenic substrate)
Protein, total	Heparin plasma, serum	Photometry (chromogenic substrate)
Phosphorus (inorganic)	Heparin plasma, serum	Photometry (phosphorus molybdate)
Serum indices	Heparin plasma, serum	Calculation of absorbance measurements at different wavelengths
Triglycerides	Heparin plasma, serum	Enzymatic colour test

Type of test:

Electrochemical tests *

Analyte (measurand)	Test material (matrix)	Test technique
Calcium, ionised	Heparinised whole blood (arterial, mixed venous, central venous, peripheral venous)	Potentiometry (ISE technology)
Chloride	Heparin plasma, serum	Indirect ISE
Chloride	Heparinised whole blood (arterial, mixed venous, central venous, peripheral venous)	Potentiometry (ISE technology)
CO-haemoglobin	Heparinised whole blood (arterial, mixed venous, central venous, peripheral venous)	Thick-film hybrid technology and solid-state design (sensor technology)
Glucose	Heparinised whole blood (arterial, mixed venous, central venous, peripheral venous)	Amperometry using enzyme electrodes and glucose oxidase
Potassium	Heparin plasma, serum	Indirect ISE
Potassium	Heparinised whole blood (arterial, mixed venous, central venous, peripheral venous)	Potentiometry (ISE technology)
Lactate	Heparinised whole blood (arterial, mixed venous, central venous, peripheral venous)	Amperometry

Analyte (measurand)	Test material (matrix)	Test technique
Met haemoglobin	Heparinised whole blood (arterial, mixed venous, central venous, peripheral venous)	Thick-film hybrid technology and solid-state design (sensor technology)
Sodium	Heparin plasma, serum	Indirect ISE
p02	Heparinised whole blood (arterial, mixed venous, central venous, peripheral venous)	Amperometry within the framework of the principles applicable to Clark electrodes
pH	Heparinised whole blood (arterial, mixed venous, central venous, peripheral venous)	Potentiometry (ISE technology)

Type of test:

Spectrometry (turbidimetry/immunoturbidimetry)*

Analyte (measurand)	Test material (matrix)	Test technique
CRP	Heparin plasma, serum	Particle-enhanced immunological turbidity test
D-Dimer	Citrate plasma	Particle-enhanced immunological turbidity test
Ferritin	Heparin plasma, serum	Particle-enhanced immunological turbidity test
Lipoprotein (a) **NEW**	Heparin plasma, serum	Immunological turbidity test
Protein in cerebrospinal fluid	Cerebrospinal fluid	Turbidimetry
Con Willebrand factor antigen	Citrate plasma	Particle-enhanced immunological turbidity test

Type of test:

Ligand assays*

Analyte (measurand)	Test material (matrix)	Test technique
Beta HCG	Serum, heparin plasma	ECLIA
Free thyroxine	Serum, heparin plasma	ECLIA
Interleukin-6	Serum, heparin plasma	ECLIA
Methotrexate	Serum, heparin plasma	Homogeneous immunoassay
Myoglobin **NEW**	Serum, heparin plasma	ECLIA
NT-proBNP	Heparin plasma, serum	ECLIA
Parathyroid hormone, intact	EDTA plasma, serum	ECLIA
Triiodothyronine	Serum, heparin plasma	ECLIA
Troponin T	Heparin plasma, serum	ECLIA
TSH	Serum, heparin plasma	ECLIA

Type of test:

Spectrometry (reflectometry / carrier-bound methods of analysis)*

Analyte (measurand)	Test material (matrix)	Test technique
Bilirubin	Urine	Reflectometry (test strips)
Blood	Urine	Reflectometry (test strips)
Glucose	Urine	Reflectometry (test strips)

Analyte (measurand)	Test material (matrix)	Test technique
Ketone	Urine	Reflectometry (test strips)
Leukocytes	Urine	Reflectometry (test strips)
Nitrite	Urine	Reflectometry (test strips)
pH	Urine	Reflectometry (test strips)
Protein	Urine	Reflectometry (test strips)
Specific gravity	Urine	Reflectometry (test strips)
Urobilinogen	Urine	Reflectometry (test strips)

Type of test:

Coagulometry*

Analyte (measurand)	Test material (matrix)	Test technique
APC resistance	Citrate plasma	Coagulometry
aPTT with Actin FS reagent	Citrate plasma	Coagulometry
aPTT	Citrate plasma	Coagulometry
Fibrinogen	Citrate plasma	Coagulometry
Factor II	Citrate plasma	Coagulometry
Factor IX	Citrate plasma	Coagulometry
Factor XI	Citrate plasma	Coagulometry
Factor XII	Citrate plasma	Coagulometry
Factor VIII	Citrate plasma	Coagulometry
Protein C	Citrate plasma	Coagulometry
Protein S	Citrate plasma	Coagulometry
TPZ value (quick)	Citrate plasma	Coagulometry

Type of test:

Flow cytometry (including particle property determination)*

Analyte (measurand)	Test material (matrix)	Test technique
Basophils	EDTA whole blood	Flow cytometry
Eosinophils	EDTA whole blood	Flow cytometry
Erythroblasts	EDTA whole blood	Flow cytometry
Erythrocytes	EDTA whole blood	Impedance measurement
Fragmentocytes	EDTA whole blood	Flow cytometry
Haematocrit	EDTA whole blood	Impedance measurement
Immature granulocytes	EDTA whole blood	Flow cytometry
Immature platelet fraction	EDTA whole blood	Flow cytometry
Leukocytes	EDTA whole blood	Flow cytometry and impedance measurement
Lymphocytes	EDTA whole blood	Flow cytometry
MCH	EDTA whole blood	Calculated value
MCHC	EDTA whole blood	Calculated value
MCV	EDTA whole blood	Calculated value
Monocytes	EDTA whole blood	Flow cytometry
MPV	EDTA whole blood	Calculated value

Analyte (measurand)	Test material (matrix)	Test technique
Neutrophils	EDTA whole blood	Flow cytometry
Ret-He	EDTA whole blood	Flow cytometry
Reticulocytes	EDTA whole blood	Flow cytometry
RPI	EDTA whole blood	Calculated value
Thrombocytes	EDTA whole blood	Flow cytometry and impedance measurement
Thrombocytes	Citrated whole blood	Flow cytometry and impedance measurement
Thrombocytes	Thrombo-exact whole blood	Flow cytometry and impedance measurement
Cell count	Cerebrospinal fluid	Flow cytometry

Type of test:

Microscopy*

Analyte (measurand)	Test material (matrix)	Test technique
Atypical cells	EDTA whole blood	Microscopic differentiation of smear preparation after Pappenheim staining
Basophils	EDTA whole blood	Microscopic differentiation of smear preparation after Pappenheim staining
Blasts	EDTA whole blood	Microscopic differentiation of smear preparation after Pappenheim staining
Eosinophils	EDTA whole blood	Microscopic differentiation of smear preparation after Pappenheim staining
Erythroblasts	EDTA whole blood	Microscopic differentiation of smear preparation after Pappenheim staining
Erythrocyte morphology	EDTA whole blood	Microscopic differentiation of smear preparation after Pappenheim staining
Core shadow	EDTA whole blood	Microscopic differentiation of smear preparation after Pappenheim staining
Leukocyte morphology	EDTA whole blood	Microscopic differentiation of smear preparation after Pappenheim staining
Lymphocytes	EDTA whole blood	Microscopic differentiation of smear preparation after Pappenheim staining

Analyte (measurand)	Test material (matrix)	Test technique
Lymphocytes, abnormal	EDTA whole blood	Microscopic differentiation of smear preparation after Pappenheim staining
Lymphocytes, reactive	EDTA whole blood	Microscopic differentiation of smear preparation after Pappenheim staining
Metamyelocytes	EDTA whole blood	Microscopic differentiation of smear preparation after Pappenheim staining
Monocytes	EDTA whole blood	Microscopic differentiation of smear preparation after Pappenheim staining
Myelocytes	EDTA whole blood	Microscopic differentiation of smear preparation after Pappenheim staining
Plasma cells	EDTA whole blood	Microscopic differentiation of smear preparation after Pappenheim staining
Promyelocytes	EDTA whole blood	Microscopic differentiation of smear preparation after Pappenheim staining
Segmented	EDTA whole blood	Microscopic differentiation of smear preparation after Pappenheim staining
Sezary cells	EDTA whole blood	Microscopic differentiation of smear preparation after Pappenheim staining
Rod core	EDTA whole blood	Microscopic differentiation of smear preparation after Pappenheim staining
Thrombocyte morphology	EDTA whole blood	Microscopic differentiation of smear preparation after Pappenheim staining

Department of Laboratory Medicine & Toxicology, Central Laboratory Klinikum Neukölln

Location: Rudower Straße 48, 12351 Berlin

Test area: Clinical chemistry

Type of test:

Spectrometry (photometry)*

Analyte (measurand)	Test material (matrix)	Test technique
ALT	Serum, heparin plasma	Photometry
Albumin	Serum, heparin plasma	Photometry
Ammonia	EDTA plasma	Photometry
Anti-Xa activity (NMH)	Citrate plasma	Photometry
Anti-Xa activity (UFH)	Citrate plasma	Photometry
AP	Serum, heparin plasma	Photometry
AST	Serum, heparin plasma	Photometry
AT3	Citrate plasma	Photometry
Bilirubin, direct	Serum, heparin plasma	Photometry
Bilirubin, total	Serum, heparin plasma	Photometry
Calcium	Serum, heparin plasma	Photometry
Cholesterol	Serum, heparin plasma	Photometry
Cholesterol HDL	Serum, heparin plasma	Photometry
Cholesterol LDL	Serum, heparin plasma	Photometry
Cholinesterase	Serum, heparin plasma	Photometry
CK	Serum, heparin plasma	Photometry
CK-MB	Serum, heparin plasma	Photometry
Creatinine	Serum, heparin plasma	Photometry
Ethanol	Serum, heparin plasma	Photometry
Gamma GT	Serum, heparin plasma	Photometry
Total protein	Serum, heparin plasma	Photometry
Glucose	Serum, heparin plasma, fluoride plasma, cerebrospinal fluid	Photometry
Haemoglobin	EDTA whole blood	Photometry
Uric acid	Serum, heparin plasma	Photometry
Urea	Serum, heparin plasma	Photometry
Lactate	Fluoride plasma, cerebrospinal fluid	Photometry
LDH	Serum, heparin plasma	Photometry
Lipase	Serum, heparin plasma	Photometry
Lithium	Serum	Photometry
Magnesium	Serum, heparin plasma	Photometry
Phosphate	Serum, heparin plasma	Photometry
Triglycerides	Serum, heparin plasma	Photometry

Type of test:

Spectrometry (turbidimetry)*

Analyte (measurand)	Test material (matrix)	Test technique
CRP	Serum, heparin plasma	Turbidimetry
D-Dimer	Citrate plasma	Particle vers. immunolog. turbidity
Total protein	Cerebrospinal fluid	Turbidimetry

Type of test:

Ligand assays*

Analyte (measurand)	Test material (matrix)	Test technique
Beta-HCG	Serum, heparin plasma	ECLIA
IL-6	Serum, heparin plasma	ECLIA
Methotrexate	Serum, heparin plasma	Homogeneous immunoassay
Parathyroid hormone	Serum, EDTA plasma	ECLIA
PCT	Serum, heparin plasma	ECLIA
T3, free	Serum, heparin plasma	ECLIA
T3, total	Serum, heparin plasma	ECLIA
T4, free	Serum, heparin plasma	ECLIA
Troponin	Serum, heparin plasma	ECLIA
TSH	Serum, heparin plasma	ECLIA

Type of test:

Reflectometry / carrier-based methods of analysis*

Analyte (measurand)	Test material (matrix)	Test technique
Bilirubin	Urine	Reflectometry (test strips)
Blood	Urine	Reflectometry (test strips)
Glucose	Urine	Reflectometry (test strips)
Ketone	Urine	Reflectometry (test strips)
Leukocytes	Urine	Reflectometry (test strips)
Nitrite	Urine	Reflectometry (test strips)
pH	Urine	Reflectometry (test strips)
Protein	Urine	Reflectometry (test strips)
Specific gravity	Urine	Reflectometry (test strips)
Urobilinogen	Urine	Reflectometry (test strips)

Type of test:

Microscopy**

Analyte (measurand)	Test material (matrix)	Test technique
Basophils	EDTA whole blood	Light microscopy after staining
Eosinophils	EDTA whole blood	Light microscopy after staining
Erythrocytes	Urine	Light microscopy
Fetal erythrocytes	EDTA whole blood	Light microscopy after staining

Analyte (measurand)	Test material (matrix)	Test technique
Fragmentocytes	EDTA whole blood	Light microscopy after staining
Leukocytes	Urine	Light microscopy
Lymphocytes	EDTA whole blood	Light microscopy after staining
Monocytes	EDTA whole blood	Light microscopy after staining
Neutrophils	EDTA whole blood	Light microscopy after staining
Cell count	Cerebrospinal fluid	Light microscopy

Type of test:

Flow cytometry (including particle property determination)*

Analyte (measurand)	Test material (matrix)	Test technique
Basophils	EDTA whole blood	Flow cytometry
Eosinophils	EDTA whole blood	Flow cytometry
Erythroblasts	EDTA whole blood	Flow cytometry
Erythrocytes	EDTA whole blood	Impedance measurement
Fragmentocytes	EDTA whole blood	Flow cytometry
Haematocrit	EDTA whole blood	Impedance measurement
Immature granulocytes	EDTA whole blood	Flow cytometry
Immature platelet fraction	EDTA whole blood	Flow cytometry
Leukocytes	EDTA whole blood	Impedance measurement, flow
Lymphocytes	EDTA whole blood	Flow cytometry
MCH	EDTA whole blood	Calculation
MCHC	EDTA whole blood	Calculation
MCV	EDTA whole blood	Calculation
Monocytes	EDTA whole blood	Flow cytometry
MPV	EDTA whole blood	Calculation
Neutrophils	EDTA whole blood	Flow cytometry
Ret-He	EDTA whole blood	Flow cytometry
Reticulocytes	EDTA whole blood	Flow cytometry
Reticulocyte production index	EDTA whole blood	Calculation
Thrombocytes	EDTA, citrate, ThromboExact whole	Impedance measurement, flow
Cell count	Cerebrospinal fluid	Flow cytometry

Type of test:

Coagulometry*

Analyte (measurand)	Test material (matrix)	Test technique
aPTT	Citrate plasma	Coagulometry
Fibrinogen	Citrate plasma	Coagulometry
TPZ	Citrate plasma	Coagulometry

Type of test:

Electrochemical tests *

Analyte (measurand)	Test material (matrix)	Test technique
Chloride	Serum, heparin plasma	Potentiometry (ISE)
Potassium	Serum, heparin plasma	Potentiometry (ISE)
Sodium	Serum, heparin plasma	Potentiometry (ISE)

Test area: Microbiology

Type of test:

Microscopy

Analyte (measurand)	Test material (matrix)	Test technique
Plasmodium spec. (malaria pathogen)	Thick blood film, EDTA whole blood	Light microscopy after staining

Test area: Transfusion medicine

Type of test:

Agglutination tests*

Analyte (measurand)	Test material (matrix)	Test technique
Antibody differentiation	EDTA whole blood	Column agglutination
Antibody screening	EDTA whole blood	Column agglutination
Blood group	Whole blood, EDTA whole blood, umbilical cord blood	Column agglutination
Coombs test, direct	Whole blood, EDTA whole blood	Column agglutination
Coombs test, indirect	Whole blood, EDTA whole blood	Column agglutination
Kell system	Whole blood, EDTA whole blood	Column agglutination
Rh factor	Whole blood, EDTA whole blood	Column agglutination
Rh system	Whole blood, EDTA whole blood	Column agglutination

Department of Endocrinology & Metabolism

Location: Sylter Straße 2, 13353 Berlin

Test area: Clinical chemistry

Type of test:
Chromatography (thin layer chromatography (DC))**

Analyte (measurand)	Test material (matrix)	Test technique
Oligosaccharides	Urine	DC qualitative

Type of test:
Chromatography (gas chromatography (GC-MS))**

Analyte (measurand)	Test material (matrix)	Test technique
Organic acids, qualitative	Urine	GC-MS
Benzoate	EDTA plasma	GC-MS

Type of test:
Chromatography (column chromatography (CC))**

Analyte (measurand)	Test material (matrix)	Test technique
Amino acids	EDTA plasma	Ion exchange chromatography

Type of test:
Electrophoresis**

Analyte (measurand)	Test material (matrix)	Test technique
Mucopolysaccharides	Urine	Agarose gel zone electrophoresis

Type of test:
Functional examinations on the patient*

Analyte (measurand)	Test material (matrix)	Test technique
Arginine or clonidine or glucagon test	Serum, fluoride plasma	Functional tests and profiles
Insulin hypoglycaemia test	Serum, fluoride plasma, EDTA plasm	Functional tests and profiles
GHRH test	Serum	Functional tests and profiles
GHRH arginine test	Serum	Functional tests and profiles
CRH test	Serum, EDTA plasma	Functional tests and profiles
TRH test	Serum	Functional tests and profiles
TRH test with prolactin	Serum	Functional tests and profiles
GH suppression test	Serum, fluoride plasma	Functional tests and profiles
OGTT with insulin	Serum, fluoride plasma	Functional tests and profiles
OGTT with C-peptide	Serum, fluoride plasma	Functional tests and profiles
i.v.GTT	Serum, fluoride plasma	Functional tests and profiles
ACTH short test - cortisol	Serum	Functional tests and profiles

Analyte (measurand)	Test material (matrix)	Test technique
ACTH short test - AGS	Serum	Functional tests and profiles
NaCL infusion test (orthostasis test)	Serum	Functional tests and profiles
Pentagastrin or Ca stimulation test	Serum	Functional tests and profiles
Secretin test	Serum	Functional tests and profiles
Thirst test	Serum	Functional tests and profiles
Prolactin	Serum	Functional tests and profiles
17-OH progesterone	Saliva	Functional tests and profiles
17-OH progesterone	Serum	Functional tests and profiles
Cortisol	Saliva	Functional tests and profiles
Cortisol	Serum	Functional tests and profiles
Aldosterone	Serum, EDTA plasma	Functional tests and profiles
Glucose	Fluoride plasma	Functional tests and profiles
Insulin	Serum	Functional tests and profiles
C-peptide	Serum	Functional tests and profiles

Type of test:

Ligand assays*

Analyte (measurand)	Test material (matrix)	Test technique
hGH	Serum	Chemiluminescence
1,25-vitamin D	Serum	Chemiluminescence
25-vitamin D sensitive	Serum	Chemiluminescence
Ostase BAP	Serum	Spectrophotometry
Aldosterone	Serum, EDTA plasma	Chemiluminescence
Renin	EDTA plasma	Chemiluminescence
DPD (deoxypyridinoline)	Urine	Chemiluminescence
EPO (erythropoietin)	Serum	Chemiluminescence
Calcitonin	Serum	Chemiluminescence
C-peptide	Serum	Chemiluminescence
ACTH	EDTA plasma	Chemiluminescence
17-OH-P	Serum	Chemiluminescence
17-OH-P	Saliva	Enzyme immunoassay
Gastrin	Serum	Radioimmunoassay
IA2	Serum	Radioimmunoassay
DHEAS	Serum, heparin plasma	Chemiluminescence
DHEA	Serum, EDTA plasma	Radioimmunoassay
Androstenedione	Serum	Radioimmunoassay
Chromogranin A II	Serum	Immunofluorescence
Free testosterone	Serum	ECLIA
Oestrone	Serum	Radioimmunoassay
Cortisol in saliva	Saliva	Chemiluminescence

Analyte (measurand)	Test material (matrix)	Test technique
Dihydrotestosterone	Serum	Enzyme immunoassay
Osteocalcin	Serum	Chemiluminescence
Testosterone	Serum	Chemiluminescence
Insulin	Serum	Chemiluminescence
Prolactin	Serum	Chemiluminescence
SHBG	Serum	Chemiluminescence
CTX-I CrossLaps	Serum	Chemiluminescence
PINP	Serum	Chemiluminescence
TRAcP 5b	Serum, heparin plasma	Chemiluminescence
Anti-Müller hormone	Serum, Li-heparin plasma	Chemiluminescence
IGF1	Serum	Chemiluminescence
IGFBP3	Serum	Chemiluminescence
Proinsulin	Serum	Enzyme immunoassay

Type of test:
Spectrometry (UV/VIS photometry)*

Analyte (measurand)	Test material (matrix)	Test technique
Lactate	Whole blood (perchloric acid extract), urine, cerebrospinal fluid	Endpoint determination
Pyruvate	Whole blood (perchloric acid extract), cerebrospinal fluid	Endpoint determination
Free fatty acids	EDTA plasma	Endpoint determination
3-hydroxybutyrate	EDTA plasma	Kinetic test
Free galactose	Whole blood (perchloric acid	Endpoint determination
Total glycosaminoglycans	Urine	Endpoint determination
Carnitine	Urine, EDTA plasma	Endpoint determination
Bile acid	Serum	Endpoint determination

Type of test:
Spectrometry (tandem mass spectrometry)**

Analyte (measurand)	Test material (matrix)	Test technique
Progesterone	Dried blood, serum	Tandem mass spectrometry
Cortisone	Dried blood, serum	Tandem mass spectrometry
17a-hydroxy-progesterone	Dried blood, serum	Tandem mass spectrometry
Deoxycorticosterone	Dried blood, serum	Tandem mass spectrometry
Androstenedione	Dried blood, serum	Tandem mass spectrometry
Testosterone	Dried blood, serum	Tandem mass spectrometry
Dihydrotestosterone	Dried blood, serum	Tandem mass spectrometry
Cortisol	Dried blood, serum	Tandem mass spectrometry
11-deoxycortisol	Dried blood, serum	Tandem mass spectrometry
21-deoxycortisol	Dried blood, serum	Tandem mass spectrometry
Corticosterone	Dried blood, serum	Tandem mass spectrometry
Metanephrine	EDTA plasma	Tandem mass spectrometry
Normetanephrine	EDTA plasma	Tandem mass spectrometry
3-methoxythyramine	EDTA plasma	Tandem mass spectrometry
Methylmalonic acid	Urine, serum, EDTA plasma	Tandem mass spectrometry
Purines / pyrimidines	Urine	LC-MS/MS

Test area: Immunology

Type of test:
Ligand assays*

Analyte (measurand)	Test material (matrix)	Test technique
IAA insulin autoantibodies	Serum	Radioimmunoassay
TRAbs	Serum	Immunofluorescence

Department of Microbiology & Hygiene

Location: Campus Virchow-Klinikum, Sylter Straße 2, 13353 Berlin

Test area: Microbiology

Type of test:
Bacterial and fungal sensitivity tests**

Analyte (measurand)	Test material (matrix)	Test technique
Aerobically growing bacteria	Bacterial colonies from aerobically incubated solid media	EUCAST agar diffusion test
Aerobically growing bacteria	Bacterial colonies from aerobically incubated solid media	Breakpoint method (ETEST)
Aerobically growing bacteria	Bacterial colonies from aerobically incubated solid media	Microdilution Test (Merlin Micronaut system)
Aerobically growing bacteria	Bacterial colonies from aerobically incubated solid media	Semi-automatic breakpoint method
Aerobically growing bacteria	Bacterial colonies from anaerobically incubated solid media	Breakpoint method in liquid medium (Biomerieux ATB strips)
Yeast-like fungi	Colonies of relevant media	Breakpoint method (ETEST)
Yeast-like fungi	Colonies of relevant media	Semi-automatic breakpoint method
Filamentous fungi	Colonies of relevant media	Breakpoint method (ETEST)

Type of test:
Microbial differentiation / identification / genotyping*

Analyte (measurand)	Test material (matrix)	Test technique
Aerobically or anaerobically growing bacteria	Bacterial colonies from aerobically or anaerobically incubated solid	Biochemical differentiation
Mycoplasma hominis / ureaplasma urealyticum	Urine, tracheal secretions of neonates, vaginal, cervical, urethral swabs	Biochemical differentiation
Yeast-like fungi	Incubated solid media	Biochemical differentiation
Aerobically or anaerobically growing bacteria	Bacterial colonies from aerobically incubated solid media	Mass spectrometry
Yeast-like fungi	Incubated solid media	Mass spectrometry
Salmonella, Shigella, Yersinia	Incubated solid media	Serum agglutination

Type of test:
Cultural tests**

Analyte (measurand)	Test material (matrix)	Test technique
Bacteria and fungi	Blood, cerebrospinal fluid, puncture specimens	Culture cultivation in blood culture bottles in semi-automatic incubator
Bacteria and fungi	Swabs, puncture specimens, respiratory material, stool, urine, intraoperative material (as part of patient care)	Culture cultivation on different media and temperatures, at normal atmosphere or 5% CO2
Bacteria and fungi	Osteosynthesis and prosthesis material (as part of patient care)	Sonication of prostheses culture cultivation on different media and temperatures, at normal atmosphere or 5% CO2

Type of test:
Ligand assays*

Analyte (measurand)	Test material (matrix)	Test technique
Helicobacter pylori antigen	Stool	ELISA
Entamoeba histolytica/ dispar antigen	Stool	ELISA
Gardia lamblia antigen	Stool	ELISA
Clostridium difficile antigen (GDH)	Stool	ELISA
Clostridium difficile antigen (toxin A+B)	Stool, bacterial colonies from aerobically incubated solid media	ELISA
Carbapenemases from Enterobacteriaceae, Acinetobacter	Bacterial colonies from aerobically incubated solid media	Immunochromatographic immunoassay
Modified penicillin binding protein Staphylococcus aureus	Bacterial colonies from aerobically incubated solid media	Immunochromatographic immunoassay
Cryptosporidium parvum	Stool	Immunochromatographic immunoassay (rapid test)

Type of test:

Microscopy*

Analyte (measurand)	Test material (matrix)	Test technique
Bacteria and yeast-like fungi	Primary sterile materials, intraoperative materials, positive blood cultures, respiratory materials, vaginal and cervical swabs, culture samples	Bright-field microscopy: - After colouring using stains, - Without colouring
Yeast-like and filamentous fungi	Primary sterile materials, intraoperative material, positive blood cultures, respiratory material, culture samples	direct fluorescence microscopy using fluorochromes
Yeast-like and filamentous fungi	Dermatological materials, culture samples	Phase contrast microscopy - After staining with dyes - Without staining
Cryptococci	Cerebrospinal fluid	Ink preparation, microscopy
Pneumocystis jirovecii	Respiratory material	Immunofluorescence
Worm eggs, protozoa, larvae	Stool, urine, bile, duodenal juice	Enrichment, microscopy
Lamblia	Tissue	Giemsa staining, bright field microscopy
Cryptosporidium	Stool	Kinyoun staining, microscopy

Type of test:

Molecular biological tests (amplification procedures)*

Analyte (measurand)	Test material (matrix)	Test technique
Bordetella pertusis, Bordetella parapertussis	Secretion of the respiratory tract	Amplification (real-time PCR)
Chlamydia pneumoniae	Secretion of the respiratory tract	Amplification (real-time PCR)
Chlamydia trachomatis	First-stream urine, e-swab, dry swab	Amplification (real-time PCR)
Legionella pneumophila	Secretion of the respiratory tract	Amplification (real-time PCR)
MTB complex	Respiratory material, culture material	Amplification (real-time PCR)
Mycoplasma pneumoniae	Secretion of the respiratory tract	Sequence-specific detection (real-time PCR)
Neisseria gonorrhoeae	First-stream urine, e-swab, dry swab	Amplification (real-time PCR)

Analyte (measurand)	Test material (matrix)	Test technique
Neurotropic bacteria: E. coli, H. influenzae, L. monocytogenes, N. meningitidis, S. agalactiae, S. pneumoniae and yeast: Cyrptococcus neoformans/gattii	Cerebrospinal fluid	Sequence-specific detection (multiplex real-time PCR)
Respiratory bacteria Bortella pertussis, Clamydophila pneumoniae, mycoplasma pneumoniae	Respiratory material (secretion, swab, lavage fluid, BAL)	Sequence-specific detection (multiplex real-time PCR)
Respiratory bacteria: Clamydophila pneumoniae, mycoplasma pneumoniae, Legionella pneumophila	Swab from the nose and throat, BAL, respiratory secretions	Sequence-specific detection (multiplex real-time PCR)
Mycoplasma panel (Mycoplasma hominis, Mycoplasma genitalium and Ureaplasma urealyticum/parvum)	Human genital swabs and urine	PCR with subsequent hybridisation
Toxoplasma gondii	Cerebrospinal fluid, EDTA/citrate plasma	Amplification (real-time PCR)
Pneumocystis jirovecii	Human bronchoalveolar lavage (BAL)	Amplification (real-time PCR)
Bacteria and fungi (important facultative pathogenic species)	Positive blood cultures	Amplification (real-time PCR), multiplex PCR

Test area: Virology

Type of test:

Ligand assays*

Analyte (measurand)	Test material (matrix)	Test technique
Norovirus antigen	Stool	ELISA
Rotavirus antigen	Stool	ELISA
Adenovirus antigen	Stool	ELISA

Test area: Microbiology

Location: Campus Virchow-Klinikum, Augustenburger Platz 1, 13353 Berlin

Type of test:

Sensitivity testing of bacteria**

Analyte (measurand)	Test material (matrix)	Test technique
M. tuberculosis-complex	Culture material from solid and liquid cultures	Modified proportion method in liquid media

Type of test:

Cultural tests**

Analyte (measurand)	Test material (matrix)	Test technique
Mycobacteria (M. tuberculosis complex, non-tuberculous mycobacteria (NTM))	Respiratory materials, gastric fasting secretions, gastric lavage fluid, morning urine, mentrual blood, semen, prostate secretions, blood, bone marrow, puncture specimens (cerebrospinal fluid, ascites, pleural puncture specimens, abscess puncture specimens), aspirates, exudates, tissue samples, smears, stool	Enrichment process, at different temperatures, specific (selective), non-specific
Mycobacteria (M. tuberculosis complex, non-tuberculous mycobacteria (NTM))	Blood, cerebrospinal fluid, puncture specimens	Culture cultivation in blood culture bottles in semi-automatic incubator

Type of test:

Ligand assays*

Analyte (measurand)	Test material (matrix)	Test technique
M. tuberculosis complex MPT64 antigen	Culture material from liquid cultures	Immunochromatographic immunoassay

Type of test:
Microscopy*

Analyte (measurand)	Test material (matrix)	Test technique
Mycobacteria	Respiratory materials, gastric fasting secretions, gastric lavage fluid, mentrual blood, semen, prostate secretions, blood, bone marrow, puncture specimens (cerebrospinal fluid, ascites, pleural puncture specimens, abscess puncture specimens), aspirates, exudates, tissue samples, smears, culture samples	Fluorescence microscopy (auramine staining)
Mycobacteria	Respiratory materials, gastric fasting secretions, gastric lavage fluid, mentrual blood, semen, prostate secretions, blood, bone marrow, puncture specimens (cerebrospinal fluid, ascites, pleural puncture specimens, abscess puncture specimens), aspirates, exudates, tissue samples, smears, culture samples	Bright field microscopy after staining with dyes (kinyoun staining)

Type of test:
Molecular biological tests (amplification procedures)*

Analyte (measurand)	Test material (matrix)	Test technique
M. tuberculosis-complex	Sputum	Amplification (real-time PCR)
M. tuberculosis-complex	Respiratory materials, gastric fasting secretions, gastric lavage fluid, mentrual blood, semen, prostate secretions, blood, bone marrow, puncture specimens (cerebrospinal fluid, ascites, pleural puncture specimens, abscess puncture specimens), aspirates, exudates, tissue samples, smears, culture samples (from liquid and solid cultures)	Genotypic susceptibility testing
M. tuberculosis complex, non-tuberculous mycobacteria (NTM)	Culture material (from liquid and solid cultures)	PCR with subsequent hybridisation (for typing)
Non-tuberculous mycobacteria (NTM) = MAI complex and M. abscessus, M. chelonae complex	Culture material (from liquid and solid cultures)	Genotypic susceptibility testing

Analyte (measurand)	Test material (matrix)	Test technique
PVL-/ mecA- mec-C	S. aureus culture isolates	PCR with subsequent hybridisation