

## List of activities within the flexible scope of accreditation

**Accredited Body:** Fakultní nemocnice Olomouc  
**CAB Name:** Clinical Biochemistry Department Laboratories  
**CAB Number:** 8254  
**Certificate of Accreditation No.:** 174/2025  
**Field of Accreditation:** Medical Laboratory - ČSN EN ISO 15189 ed. 3:2023  
**Updated:** 19. 5. 2025

### 1. Clinical Biochemistry Department Laboratories, Pavilion "I"

Zdravotníků 248/7, 779 00 Olomouc

#### Examinations:

| Ordinal Number                     | Analyte/parameter/diagnostics      | Principle of examination     | Identification of method procedure/ equipment                                                                                                                                  | Examined material | Degrees of freedom <sup>1</sup> |
|------------------------------------|------------------------------------|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|---------------------------------|
| <b>801 – Clinical Biochemistry</b> |                                    |                              |                                                                                                                                                                                |                   |                                 |
| 1.                                 | Non-protein nitrogenous substances | Absorption spectrophotometry | SOPV-035, version 03;<br>SOPV-034, version 05;<br>SOPV-033, version 03;<br>Atellica Solution CH 930                                                                            | Serum, urine      | A, B                            |
| 2.                                 | Bilirubin                          | Absorption spectrophotometry | SOPV-045, version 05;<br>Atellica Solution CH 930                                                                                                                              | Serum             | A, B                            |
| 3.                                 | Minerals                           | Potentiometry                | SOPV-038, version 03;<br>SOPV-039, version 03;<br>SOPV-040, version 03;<br>Atellica Solution CH 930                                                                            | Serum, urine      | A, B, C                         |
| 4.                                 | Minerals                           | Absorption spectrophotometry | SOPV-043, version 04;<br>SOPV-044, version 04;<br>SOPV-047, version 03;<br>Atellica Solution CH 930                                                                            | Serum             | A, B, C                         |
| 5.                                 | Enzymes                            | Absorption spectrophotometry | SOPV-031, version 04;<br>SOPV-016, version 04;<br>SOPV-030, version 04;<br>SOPV-036, version 05;<br>SOPV-042, version 05;<br>SOPV-187, version 04;<br>Atellica Solution CH 930 | Serum             | A, B, C                         |

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|----------------|------------------------------------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|-------------------|---------------------------------|
| 6.             | Lipids                             | Absorption spectrophotometry                                                              | SOPV-049, version 04;<br>SOPV-050, version 05;<br>Atellica Solution CH 930 | Serum             | A, B, C                         |
| 7.             | Glucose                            | Absorption spectrophotometry                                                              | SOPV-041, version 04;<br>Atellica Solution CH 930                          | Serum             | A, B, D                         |
| 8.             | Lactate                            | Absorption spectrophotometry                                                              | SOPV-048, version 04;<br>Atellica Solution CH 930                          | Plasma            | A, B, D                         |
| 9.             | Cardiac markers                    | Immunoassay with luminometric detection                                                   | SOPV-021, version 03;<br>Atellica Solution IM 1600                         | Serum             | A, B, C                         |
| 10.            | Proteins                           | Absorption spectrophotometry                                                              | SOPV-037, version 05;<br>SOPV-032, version 03;<br>Atellica Solution CH 930 | Serum             | A, B                            |
| 11.            | Serum protein fractions            | Electrophoresis                                                                           | SOPV-091, version 03;<br>Hydrasys 2 Scan                                   | Serum             | A, B, D                         |
| 12.            | Osmolality                         | Cryoscopy                                                                                 | SOPV-009, version 02;<br>Arkray OM.-6060                                   | Serum, urine      | A, B                            |
| 13.            | Glycated haemoglobin               | Capillary electrophoresis                                                                 | SOPV-008, version 02;<br>Capillarys 3 OCTA                                 | Blood             | A, B                            |
| 14.            | Chemical examination of urine      | Reflection photometry;<br>Absorption spectrophotometry;<br>Turbidimetry;<br>Refractometry | SOPV-271, version 02;<br>iChem Velocity                                    | Urine             | A, B, C                         |
| 15.            | Morphological examination of urine | Digital microscopy                                                                        | SOPV-095, version 02;<br>iQ200                                             | Urine             | A, B                            |

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|-----------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------------------------|
| 16.                                                             | Tumor Markers                                                 | Immunoassay with luminometric detection | SOPV-051, version 04;<br>SOPV-052, version 03;<br>SOPV-053, version 03;<br>SOPV-057, version 04;<br>SOPV-058, version 04;<br>SOPV-054, version 03;<br>SOPV-242, version 02;<br>SOPV-060, version 04;<br>Cobas Pro e801;<br>Access2;<br>Alinity i | Serum               | A, B, C                         |
| 17.                                                             | Albumin                                                       | Immunonephelometry                      | SOPV-234, version 03;<br>Atellica 630 NEPH                                                                                                                                                                                                       | Cerebrospinal fluid | A, B                            |
| 18.                                                             | Markers for the calculation of the risk of congenital defects | Immunoassay with fluorimetric detection | SOPV-145, version 03;<br>SOPV-144, version 03;<br>SOPV-254, version 02;<br>Kryptor Compact                                                                                                                                                       | Serum               | A, B, C                         |
| 19.                                                             | Acid-base balance                                             | Potentiometry;<br>Amperometry           | SOPV-098, version 01;<br>ABL 825                                                                                                                                                                                                                 | Blood               | A, B                            |
| <b>812 – Laboratory of Pharmacology and Toxicology of drugs</b> |                                                               |                                         |                                                                                                                                                                                                                                                  |                     |                                 |
| 1.                                                              | Theophylline                                                  | Immunoturbidimetry                      | SOPV-027, version 02;<br>Atellica Solution CH 930                                                                                                                                                                                                | Serum               | A, B                            |
| 2.                                                              | Antiepileptics                                                | Immunoturbidimetry                      | SOPV-028, version 02;<br>SOPV-029, version 02;<br>Atellica Solution CH 930                                                                                                                                                                       | Serum               | A, B                            |
| <b>813 - Allergology and Immunology Laboratory</b>              |                                                               |                                         |                                                                                                                                                                                                                                                  |                     |                                 |
| 1.                                                              | Specific proteins                                             | Immunoturbidimetry                      | SOPV-046, version 05;<br>SOPV-218, version 04;<br>SOPV-219, version 03;<br>Atellica Solution CH 930                                                                                                                                              | Serum               | A, B, C                         |
| 2.                                                              | Procalcitonin                                                 | Immunoassay with luminometric detection | SOPV-020, version 03;<br>Atellica Solution IM 1600                                                                                                                                                                                               | Serum               | A, B                            |

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|------------------------------------------|-------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|---------------------------------|
| 3.                                       | Immunoglobulins               | Immunoturbidimetry                      | SOPV-070, version 02;<br>SOPV-071, version 02;<br>SOPV-072, version 02;<br>SOPV-073, version 02;<br>SOPV-074, version 02;<br>Optilite                                                                                                          | Serum                      | A, B, C                         |
| 4.                                       | Immunoglobulins               | Immunofixation electrophoresis          | SOPV-093, version 02;<br>Hydrasys 2 Scan                                                                                                                                                                                                       | Serum                      | A, B                            |
| 5.                                       | Immunoglobulins               | Immunonephelometry                      | SOPV-233, version 04;<br>Atellica 630 NEPH                                                                                                                                                                                                     | Cerebrospinal fluid        | A, B, C                         |
| 6.                                       | Oligoclonal IgG bands         | Isoelectric focusing                    | SOPV-096, version 02;<br>Hydrasys 2 Scan                                                                                                                                                                                                       | Serum, cerebrospinal fluid | A, B                            |
| <b>815 - Nuclear Medicine Laboratory</b> |                               |                                         |                                                                                                                                                                                                                                                |                            |                                 |
| 1.                                       | Myoglobin                     | Immunoassay with luminometric detection | SOPV-019, version 04;<br>Atellica Solution IM 1600                                                                                                                                                                                             | Serum                      | A, B                            |
| 2.                                       | Hormones                      | Immunoassay with luminometric detection | SOPV-024, version 04;<br>SOPV-062, version 04;<br>SOPV-063, version 04;<br>SOPV-064, version 02;<br>SOPV-065, version 02;<br>SOPV-066, version 02;<br>SOPV-067, version 02;<br>SOPV-014, version 04;<br>Atellica Solution IM 1600;<br>IDS-iSYS | Serum                      | A, B, C                         |
| 3.                                       | Vitamins                      | Immunoassay with luminometric detection | SOPV-023, version 03;<br>SOPV-026, version 03;<br>Atellica Solution IM 1600                                                                                                                                                                    | Serum                      | A, B, C                         |
| 4.                                       | Tumor Markers                 | Immunoassay with luminometric detection | SOPV-059, version 04;<br>SOPV-055, version 03;<br>Access2;<br>Cobas Pro e801                                                                                                                                                                   | Serum                      | A, B, C                         |

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|----------------|-------------------------------|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------|-------------------|---------------------------------|
| 5.             | Autoantibodies                | Immunoassay with luminometric detection | SOPV-068, version 03;<br>SOPV-069, version 04;<br>SOPV-257, version 02;<br>Atellica Solution IM 1600;<br>Immulite 2000 XPi | Serum             | A, B, C                         |
| 6.             | Bone Markers                  | Immunoassay with luminometric detection | SOPV-246, version 03;<br>Cobas Pro e801                                                                                    | Serum             | A, B, C                         |

### Specification of the scope of accreditation:

| Field Nr. / Ordinal Number | Detailed information on activities within the scope of accreditation                                                                                                                                                              |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 801/1                      | Urea, Creatinine, Uric acid                                                                                                                                                                                                       |
| 801/3                      | Na <sup>+</sup> , K <sup>+</sup> , Cl <sup>-</sup>                                                                                                                                                                                |
| 801/4                      | Ca, Mg, Fe                                                                                                                                                                                                                        |
| 801/5                      | Alanine Aminotransferase (ALT), Aspartate Aminotransferase (AST), Alkaline Phosphatase (ALP), Gamma-glutamyl transferase (GGT), Alpha amylase (AMS), Lactate Dehydrogenase (LD)                                                   |
| 801/6                      | Total cholesterol, Triacylglycerols (TAG)                                                                                                                                                                                         |
| 801/9                      | High Sensitivity Troponin I                                                                                                                                                                                                       |
| 801/10                     | Total protein, Albumin                                                                                                                                                                                                            |
| 801/11                     | Albumin, Alpha-1-globulin, Alpha-2-globulin, Beta-1-globulin, Beta-2-globulin, Gamma-globulin                                                                                                                                     |
| 801/14                     | Glucose, Protein, Bilirubin, Urobilinogen, pH, Blood, Ketones, Nitrites, Turbidity, Specific Gravity, Color, Leukocytes                                                                                                           |
| 801/15                     | Erythrocytes, Leukocytes, Bacteria, Yeasts, Epithelial Cells, Squamous Epithelial Cells, Casts, Hyaline Casts, Granular Casts, Crystals, Sperm, Mucus                                                                             |
| 801/16                     | Carbohydrate tumor antigens (CA 125, CA 19-9, CA 15-3), Free Prostate-specific Antigen (free PSA), Carcinoembryonic Antigen (CEA), Pro-Gastrin-Releasing Peptide (ProGRP), Human Chorionic Gonadotropin + beta subunit (hCG+beta) |
| 801/18                     | Pregnancy-associated plasma protein A (PAPP-A), Free beta-subunit of Human Chorionic Gonadotropin (free beta hCG), Placental growth factor (PIGF)                                                                                 |
| 801/19                     | pH, pCO <sub>2</sub> , pO <sub>2</sub>                                                                                                                                                                                            |
| 812/2                      | Valproic acid, Carbamazepine                                                                                                                                                                                                      |
| 813/1                      | C-reactive protein, Prealbumin, Transferrin                                                                                                                                                                                       |

## List of activities within the flexible scope of accreditation

| Field Nr. / Ordinal Number | Detailed information on activities within the scope of accreditation                                                                                                                                 |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 813/3                      | IgG, IgM, IgA, Kappa free light chains, Lambda free light chains                                                                                                                                     |
| 813/4                      | IgG, IgM, IgA, IgD, IgE, Kappa light chains, Lambda light chains                                                                                                                                     |
| 813/5                      | IgG                                                                                                                                                                                                  |
| 815/2                      | Thyroid Stimulating hormone (TSH), Free Thyroxine (Free T4), Free Triiodothyronine (Free T3), Luteinizing hormone (LH), Follicle-stimulating hormone (FSH), Estradiol, Prolactin, Somatotropin (hGH) |
| 815/3                      | Folate, Vitamin B12                                                                                                                                                                                  |
| 815/4                      | Total Prostate-specific Antigen (Total PSA), Alpha-fetoprotein (AFP), Neuron-specific enolase (NSE)                                                                                                  |
| 815/5                      | Anti_Tg Antibodies (Anti-Tg), Anti-TPO Antibodies (Anti-TPO), Anti-TSH Receptor Antibodies (TSI)                                                                                                     |
| 815/6                      | Biointact Parathyroid Hormone (PTH 1-84)                                                                                                                                                             |

### Primary sample collection:

| Ordinal Number <sup>2</sup> | Sample collection technique | Identification of sample collection procedure | Collected material | Degrees of freedom <sup>1</sup> |
|-----------------------------|-----------------------------|-----------------------------------------------|--------------------|---------------------------------|
| 1.                          | Venipuncture                | SOP-L015-M01/ODBĚŘŽK, version 6               | Venous blood       | A, B                            |
| 2.                          | Capillary puncture          | SOP-L015-M02/ODBĚŘKK, version 5               | Capillary blood    | A, B                            |

## List of activities within the flexible scope of accreditation

### 2. Clinical Biochemistry Department Laboratories - Laboratory for Hereditary Metabolic Disorders, Pavilion "Q"

Zdravotníků 248/7, 779 00 Olomouc

#### Examinations:

| Ordinal Number                     | Analyte/parameter/diagnostics  | Principle of examination                  | Identification of method procedure/ equipment                   | Examined material | Degrees of freedom <sup>1</sup> |
|------------------------------------|--------------------------------|-------------------------------------------|-----------------------------------------------------------------|-------------------|---------------------------------|
| <b>801 – Clinical Biochemistry</b> |                                |                                           |                                                                 |                   |                                 |
| 1.                                 | Organic acids                  | Gas chromatography with mass spectrometry | SOPV-097, version 02;<br>Analyzátor Trace GC Ultra<br>DSQ II    | Urine             | A, B, C                         |
| 2.                                 | Amino acids and acylcarnitines | Tandem mass spectrometry                  | SOPV-025, version 01;<br>API 4000, AB Sciex;<br>TQ 6500, Sciex; | Dry blood spot    | A, B, C                         |
| 3.                                 | Biotinidase                    | Fluorimetry                               | SOPV-259, version 01;<br>VICTOR X3, PerkinElmer                 | Dry blood spot    | A, B                            |

#### Specification of the scope of accreditation:

| Field Nr. / Ordinal Number | Detailed information on activities within the scope of accreditation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 801/1                      | acids: lactic, 2-hydroxyisobutyric, glycolic, pyroracemic, 2-hydroxybutyric, tartaric, 3-hydroxypropionic, isobutyric, 3-hydroxybutyric, 3-hydroxyisobutyric, 2-hydroxyisopentanoic, 2-hydroxyisopentanoic, 2-methyl-3-hydroxybutyric, propanedioic, methylmalonic, 3-hydroxyvaleric, 2-ethyl-3-hydroxypropionic, 2-hydroxyisocaproic, 4-hydroxybutyric, 2-hydroxy-3-methylvaleric, octanoic, 2-methyl-3-hydroxyvaleric, ethylmalonic, amber, 2,3-dihydroxybutyric, 5-hydroxyhexanoic, fumaric, valproic, glyoxylic, glutaric, 3,4-dihydroxybutyric, 3-methylglutaric, 3-methylglutaconic, glutaconic, 2-methylglutaconic, mevalonic, 2-methylglutaconic, adipic, 3-hydroxyadipic, 7-hydroxyoctanoic, 2-hydroxyglutaric, 3-hydroxyglutaric, phenylbutyric, 3-hydroxy-3-methylglutaric, 3-hydroxyphenylacetic, 4-hydroxycyclohexylacetic, 2-oxoglutaric, 4-hydroxyphenylacetic, N-acetylglutamic, octendioic, glutaconic, suberic, 4-hydroxyphenylpropionic, citric, homogentisic, methylcitric, 3-(3-OH-phenyl)-3-OH-propionic, decenedioic, sebacic, 3,6-epoxyoctanedioic, 4-hydroxyphenyllactic, hydroxydecanedioic, 3-hydroxysebacic, 1,12-dodecanedioic, 3,6-epoxydodecanedioic; propionylglycine, mevalonolactone, isobutyrylglycine, butyrylglycine, 5-oxoproline, 2-methylbutyrylglycine, 3-hydroxyadipolactone, isovaleryl-glycine, tiglylglycine, 3-methylcrotonylglycine, hexanoylglycine, N-acetylmethionine, phenylpropionylglycine, suberyl-glycine, N-acetyltyrosine |
| 801/2                      | amino acids and ratios: Phe, Phe/Tyr, Xle, Xle/Ala, (Xle+Val)/(Phe+Tyr), Val, Arg, Arg/Phe, Arg/Orn, Cit, Cit/Phe, Orn/Cit, ArgSucc, Met, Met/Phe<br><br>acyl-carnitines and ratios: C5, C5/C2, C5/C8, C5DC+C6OH, (C5DC+C6OH)/C8, (C5DC+C6OH)/C16, C6, C8, C8/C2, C8/C10, C10, C10:1, C14, C14:1, C14:1/C16 C16OH, C18OH, C18:1OH, C0, C16, C18, C18:1, C0/(C16+C18), (C16+C18:1)/C2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

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### Explanatory notes:

<sup>1</sup> Established degrees of freedom according to MPA 00-09-...:

A – Flexibility concerning the documented examination/ sample collection procedure

B – Flexibility concerning the technique

C – Flexibility concerning the analytes / parameters

D – Flexibility concerning the examined material

If no degree of freedom is specified, the laboratory cannot apply a flexible approach to the scope of accreditation for this examination.