Division of evaluation panels according to their professional focus

The Provider has established ten expert evaluation panels of the Czech Agency for Health Research to which applicants will submit their project proposals (according to the professional focus of the project):

- P01 Metabolic and endocrine diseases
- P02 Diseases of the circulatory system
- P03 Tumour diseases
- P04 Neuroscience and mental health
- P05 Immune disorders and infectious diseases
- P06 Organ dysfunction and critical care medicine
- P07 Age-specific groups
- P08 Biomedical technologies
- P09 Public health and nursing
- P10 Musculoskeletal medicine

The focus of the individual expert review panels is as follows:

P01 Metabolic and endocrine diseases

Panel 01 deals with metabolic aspects from the fields of: endocrinology and diabetology, clinical biochemistry and clinical pharmacology, medical genetics, paediatrics, gastroenterology, nephrology, rheumatology and other fields of internal medicine.

P02 Diseases of the circulatory system

Panel 02 deals with clinical and experimental research of cardiovascular diseases ranging from etiological and pathogenetic aspects to diagnostic, therapeutic and preventive issues of cardiovascular diseases. Priority is given to the potential of the acquired knowledge to be applied in clinical practice in order to improve the current diagnostic, therapeutic and preventive measures of cardiovascular medicine.

P03 Tumour diseases

Panel 03 deals with experimental, clinical, preventive and epidemiological issues in cancer. In the field of research on carcinogenesis, molecular biology, genetics, pharmacology and immunology of cancer, the panel prefers innovative projects with the potential for real application in oncological practice. Research in this panel covers a multidisciplinary spectrum of diagnostic, surgical, radiation, medical and other methods used or potentially applicable in oncology. Research projects in personalised and precision oncology and rare cancers are also supported.

P04 Neuroscience and mental health

Panel 04 deals with applied research in the field of etiopathogenesis, prevention, early and innovative diagnosis and treatment of psychiatric and neurological diseases in order to prevent, cure or minimize difficulties, improve functional capacity and quality of life of patients. These are mainly neurodevelopmental diseases, mental disorders in

adulthood, neurodegenerative, neurogenetic and neurometabolic diseases, vascular diseases of the brain, epilepsy, infectious and autoimmune diseases of the nervous system, as well as neurosurgical, neurotraumatological, neurooncological and neurorehabilitation issues, clinical neurophysiology and neuropsychology. Topics include the social aspects of nervous and psychiatric diseases and the organisation of the provision of health services to the nervous and psychiatrically ill.

P05 Immune disorders and infectious diseases
Panel 05 deals with the elucidation of the genetic basis, etiology, pathogenesis, diagnosis, treatment and prevention of human immunopathological diseases. These include inflammatory and autoimmune diseases, immunological hypersensitivity diseases and immunodeficiency diseases. Attention is also paid to immunological diagnostics and immunotherapy of other diseases. Communicable disease research focuses on the study of the causative agents, etiopathogenesis, diagnosis, prevention and therapy of major human infectious diseases threatening our population, including healthcare-associated infections.

P06 Organ dysfunction and critical care medicine
Panel 06 deals with organ failure and organ replacement, intensive care, resuscitation, perioperative and transplantation medicine, especially epidemiology, prevention, early detection, and the development of new therapies in these areas. Organ-specific research includes diseases of the kidney and urogenital tract, liver and gastrointestinal tract, respiratory system, ENT, eye and skin.

P07 Age-specific disease groups
Panel 07 deals with diseases that are specific to newborns, children and adolescents, but also to the senile period, and meet at least one of the following criteria: 1. their typical course at this age is significantly different and therefore represents a general health problem, 2. the medical approach to these diseases in childhood, adolescence or senile period plays a leading role in the field, 3. they have a significantly higher incidence in the mentioned age groups, including rare and ultra-rare diseases. To study the impact of genetic and environmental factors on the etiopathogenesis and pathophysiology of major diseases of childhood, adolescence and the elderly. Development of non-invasive diagnostic methods for childhood, adolescent and elderly diseases and/or development of preventive procedures and therapeutic methods to improve the quality of life of sick children, adolescents and elderly. The panel also includes diseases of pregnancy and the perinatal period if they may result in fetal and neonatal harm.

P08 Biomedical technologies
Panel 08 focuses on the research and development of biomedical and pharmaceutical technologies that directly contribute to innovation in diagnosis and treatment through technological approaches. Key areas include: (i) advanced diagnostic and therapeutic

technologies (development of new imaging techniques, innovations in molecular diagnostics, personalised and precision medicine and pharmacological approaches), (ii) development of new biomaterials and technologies for tissue and organ replacement or regeneration (design and testing of biomaterials with specific medical applications, implementation of innovative (surgical) treatment techniques using these technologies), (iii) pre-clinical research towards direct application in clinical practice (experimental development and in vivo testing of innovative technologies in animal models, application of new technological processes or materials with clear potential for clinical use), and (iv) biomedical devices and software technologies including artificial intelligence tools (development of new devices (hardware) and software solutions supporting diagnosis, therapy or health monitoring, implementation of artificial intelligence and data-driven technologies in biomedical research as well as in diagnosis and therapy). The scope of Panel P08 does not include projects focused on pure basic research without a clear technological overlap, projects focused on disease research (e.g. cardiovascular, cancer) without the development of unique technologies or innovative diagnostic/therapeutic tools, or projects that do not represent the actual development of a new technology or therapy and that use existing methods outside their primary purpose (off-target approaches). These projects fall under panels targeting specific disease groups.

P09 Public health and nursing

Panel 09 deals with public health issues including preventive medicine, hygiene, epidemiology and nursing. In the field of preventive medicine, the panel deals with preventive health care leading to improved health and quality of life at the individual and population level, specific and non-specific primary prevention including health risk assessment, and in the field of hygiene, health protection and promotion and the protection of healthy living conditions. In the field of epidemiology, the study of the prevalence of diseases and health disorders affecting the whole population and the monitoring of factors that condition or influence this prevalence at the population level, in particular environmental, lifestyle, health predispositions, climatic and social factors. Emphasis is placed on the prevention of the occurrence and spread of infectious diseases, including the characterisation of the conditions of transmission, and spread of micro-organisms, as well as of mass-occurring non-infectious diseases. In the field of public health, emphasis is placed on determinants of health, health policy objectives, strategies and tools, macro and microeconomic approaches, management systems and their application in the management of health system and health facility organization, health care quality management, statistical and informatics projects. The P9 panel also includes areas such as digitalization of health care, demographic changes, but also global health, etc. Research on communication, combating misinformation and different types of motivational campaigns are supported. In the field of nursing, the emphasis is on projects focusing on active processes to meet the biological, psychological and social needs of the sick and healthy person in their health care.

P10 Musculoskeletal medicine

Panel 10 deals with: trauma in children and adults, congenital disorders and acquired diseases in children and adults, musculoskeletal tumours, metabolic, degenerative and inflammatory diseases of the musculoskeletal system, anatomy and biomechanics of the musculoskeletal system. These topics include research in the following areas: etiology, pathogenesis, clinical, laboratory, biomechanical, imaging, and therapeutics. The concept of the panel is based on the need to elucidate some of the unresolved congenital and acquired defects, as well as to address diseases associated with the aging population, particularly in the increase of injuries and degenerative diseases and tumors, and pathological fractures and traffic and sports injuries in the younger population.