

Gastroenterology

- Radio frequency ablation, microwave ablation, and transarterial chemoembolization against hepatocellular carcinoma
- Systemic therapy for advanced hepatocellular carcinoma
- Peroral cholangioscopic lithotripsy for difficult bile duct stones including Mirizzi syndrome
- Endoscopic balloon dilation therapy using balloon assisted endoscope for the Crohn's disease patient with small bowel stenosis or stricture
- Endoscopic treatment for gastrointestinal malignant tumors in patients with the use of anti-thrombotic drugs and/or complications
- Interventional radiology for uncommon liver diseases and vascular disorders
- Intensive care for acute liver failure
- Antivirals against hepatitis B and C
- Systemic chemotherapy for hepatobiliary pancreatic cancer based on comprehensive genomic profiling
- Partial splenic embolization for thrombocytopenia caused by hypersplenism
- Ultrasound-guided biopsy of liver tumor for pathological diagnosis
- Balloon enteroscopy-assisted ERCP in patients with the postoperative reconstructed intestinal tract
- Diagnostic assessment of peroral cholangioscopy in patients with undetermined biliary lesions
- Endoscopic ultrasound-guided sampling for diagnosis of solid pancreatic tumors
- EUS-guided transluminal drainage for peripancreatic fluid collections and walled-off necrosis
- Induction and maintenance therapy for inflammatory bowel disease including ulcerative colitis and Crohn's disease
- Assessment of pathogenesis in the abdominal diseases using Doppler and contrast-enhanced ultrasonography
- Endoscopic ultrasound-guided biliary / pancreatic drainage (EUS-BD/PD) for difficult transpapillary approach

Hematology

- Diagnosis and treatment of hematologic malignancies: Acute leukemia, Chronic leukemia, Malignant lymphoma, Multiple myeloma, Myelodysplastic syndrome
- Anemias and coagulopathies: Aplastic anemia, Hemolytic anemia, Immune thrombocytopenia, Coagulopathies
- Stem cell transplantation: Allogeneic hematopoietic stem cell transplantation for hematologic malignancies and aplastic anemia
- Autologous peripheral blood stem cell transplantation for multiple myeloma, refractory lymphoma and POEMS syndrome
- Long-Term Follow-Up (LTFU) program provides life-long monitoring and care of patients following stem cell transplantation
- CAR-T

Nephrology	
<ul style="list-style-type: none"> • Renal biopsy and immunosuppressive treatments for nephrotic syndrome and glomerulonephritis • Diagnosis and treatment of inherited renal disease (e.g. Fabry disease, Polycystic kidney, Alport syndrome) • Control Gestational hypertension with obstetrician • Selection and treatment of Antihypertensive drugs against intractable hypertension without other cardiovascular diseases 	
Allergy and Clinical Immunology	
Diseases Autoimmune and rheumatic conditions	<ul style="list-style-type: none"> • Inflammatory arthritis such as rheumatoid/psoriatic arthritis • Systemic lupus erythematosus • Vasculitis • Inflammatory myositis • IgG4-related diseases • Systemic sclerosis • Behcet's disease • Adult onset Still's disease • Others
Allergic conditions	<ul style="list-style-type: none"> • Bronchial asthma • Anaphylaxis • Others
Investigations	<ul style="list-style-type: none"> • Commercial-based blood/urine tests • In-house in vitro tests • Bioassays • Imaging • Ultrasound-guided biopsy • Others
Treatments	<ul style="list-style-type: none"> • Glucocorticoids (as small dose as possible) • Immunosuppressants • Molecular-targeting drugs • Plasma apheresis • Immunoglobulin • Others

Diabetes, Metabolism, and Endocrinology	
<ul style="list-style-type: none"> • Super-selective adrenal venous sampling • Genetic diagnosis of inheritable progeroid syndromes • Chemotherapy "Mitotane and EDP" for adrenocortical cancer • Nutritional, medical, psychological and surgical treatment for obesity disease • Evaluation of insulin resistance by use of euglycemic clamp method 	
<ul style="list-style-type: none"> • Comprehensive management of diabetes and obesity 	<ul style="list-style-type: none"> • Continuous Glucose Monitoring • Insulin pump therapy • Diet, exercise, drug therapies and foot care • Peripheral neuropathy treatment with neurologist • Conversation map with trained facilitators
Cardiovascular Medicine	
Imaging modalities	<ul style="list-style-type: none"> • Echocardiography (transthoracic/transesophageal) • 320-row CT • Cardiac MRI • RI(perfusion/MIBG/BMIPP) • FDG-PET
Physiological tests	<ul style="list-style-type: none"> • Holter ECG • ABPM • baPWV • Treadmill test (exercise/drug), etc
Coronary artery disease	<ul style="list-style-type: none"> • Evaluation in the cath labo: Coronary Angiography, Intracoronary Vascular Ultrasound, fractional flow reserve, Spasm provocation • Treatment with percutaneous intervention, elective or emergent
Cardiac arrhythmia	<ul style="list-style-type: none"> • Treatment with catheter ablation • Device Implantation: Implantable Loop Recorder, Leadless Pacemaker, ICD, wearable CD, and CRT • Left atrial appendage closure • Lead extraction
Structural Heart Disease (in cooperation with cardiovascular surgeons)	<ul style="list-style-type: none"> • Transcatheter aortic valve implantation • MItraClip therapy for mitral regurgitation • Percutaneous patent foramen ovale closure
Heart Failure	<ul style="list-style-type: none"> • Diagnosis and full work-up of heart failure • Management of heart failure patients with implantable LVAD • Multidisciplinary/comprehensive management of severe heart failure patients
Hypertension	<ul style="list-style-type: none"> • Diagnosis and treatment of resistant hypertension

Respiratory Medicine	
Interstitial lung diseases	idiopathic pulmonary fibrosis (IPF), hypersensitivity pneumonitis, pulmonary alveolar proteinosis (PAP), lymphangioleiomyomatosis (LAM), drug-induced interstitial pneumonia, e.g.
Thoracic malignancies	lung cancer, mesothelioma, mediastinal tumors, e.g.
Pulmonary hypertension	pulmonary arterial hypertension, chronic thromboembolic pulmonary hypertension, e.g.
Pulmonary vascular diseases	arteriovenous malformation, pulmonary vascular abnormalities, etc.
Obstructive lung diseases	chronic obstructive pulmonary disease (COPD), diffuse panbronchiolitis (DPB), e.g.
Pulmonary allergic diseases	bronchial asthma, allergic bronchopulmonary aspergillosis, e.g.
Respiratory infection	viral and bacterial pneumonia, non-tuberculous mycobacterial infection, fungal diseases, e.g.
Sleep disorders: sleep apnea, e.g.	
Lung transplant indication diseases	
Japanese- Oriental (KAMPO) Medicine	
Kampo medicine approaches to impossibility of diagnosis by western medicine, unfounded organic factor and uncontrolled disease with western medicine from different conception, and also makes possibility of symptom improve.	
Infectious Diseases	
<ul style="list-style-type: none"> We provide diagnostic and treatment consultations for complex infectious diseases. In collaboration with Chiba University Medical Mycology Research Center, who provide diagnostic and treatment consultations for patients with difficult-to-treat fungal infections. We provide care and treatment for people living with HIV. We welcome sexual health check ups at our Sexual Health Clinic, open Wednesday and Friday AM. 	
Medical Oncology	
<ul style="list-style-type: none"> Clinical trials with new agents for lung cancer Treatment for cancer of unknown primary site with nivolumab Clinical profiling sequencing test for cancer Cross-sectional care for malignant solid tumors Anticancer therapy for rare cancers 	
General Medicine	
Diagnosis and problem-solving for a variety of health problems, including unexplained symptoms as well as common conditions, through comprehensive and integrated approach	

Cardiovascular Surgery

- Implantable ventricular assist device for severe heart failure
- Pulmonary artery thromboendarterectomy for chronic thromboembolic pulmonary hypertension
- Surgical left ventricular reconstruction and valve repair for ischemic heart failure
- Stent grafting for thoracic and/or abdominal aortic aneurysm
- Coronary artery bypass grafting for coronary artery disease
- Valve reconstruction and/or replacement for valvular heart disease

Esophageal-Gastro-Intestinal Surgery

- Diagnosis and multidiscipline treatments for gastrointestinal cancers
- Esophagectomy with 3-field lymphadenectomy for esophageal cancer
- Chemoradiotherapy / chemotherapy for esophageal cancer and rectal cancer
- Surgical resection for gastric / duodenal / small bowel / colon cancer
- Low anterior resection and total pelvic exenteration for rectal cancer
- Surgical resection for gastrointestinal stromal tumors, neuroendocrine neoplasm, and retroperitoneal tumor
- Chemotherapy and immunotherapy for advanced gastrointestinal malignancies
- Laparoscopic treatment for esophageal achalasia
- Robotic and laparoscopic surgery for gastrointestinal malignancies
- Surgical treatment for inflammatory bowel disease
- Acute care surgery for trauma and acute abdomen caused by gastrointestinal disease
- Surgical treatment for incisional and groin hernias

General Surgery, Hepato-Biliary-Pancreatic Unit

- Surgical treatment for hepato-biliary-pancreatic disease
- Living-donor and diseased-donor liver transplantation for hepatic disease
- Multidisciplinary treatment for advanced hepato-biliary-pancreatic cancer with surgery and combined chemotherapy and radiotherapy
- Surgical treatment for benign biliary stenosis
- Minimally invasive surgery for hepato-biliary-pancreatic disease

Breast Surgery

- Comprehensive management of benign and malignant breast diseases
- Image-guided surgery for non-palpable lesions
- Immediate partial breast reconstruction using perforator flaps
- Minimally invasive surgery for early breast cancer
- Immediate total breast reconstruction with plastic surgeons
- Risk reducing mastectomy for the patients with BRCA1/2 pathogenic variants

General Thoracic Surgery

- Diagnosis and treatments for thoracic malignancies such as lung cancer, mediastinal tumors, chest wall tumors, pleural mesothelioma, and metastatic lung tumors. Not only the early-stage lung malignancies, also advanced disease including oligometastatic lung cancer or salvage surgery after chemo and/or radio therapy. Our surgical policy for locally advanced lung cancer is lung-preservation suing bronchoplasty and/or pulmonary arterial plasty techniques and preoperative precise evaluation by EBUS-TBNA, thin-slice CT and FDG-PET scan.
- Curative intended limited surgery such as anatomical segmentectomy or wedge resection to preserve remaining lung function for frail patients.
- We are actively adopting minimally invasive approaches such as robot-assisted surgery and thoroscopic surgery.
- We are actively performing surgery after preoperative induction chemo-immunotherapy for stage II-III lung cancer.
- Management of pleural diseases such as pneumothorax, pyothorax, and other intrapleural disorders.
- Diagnosis and treatments for trachea-bronchial diseases. Especially, interventional procedures such as biopsy for extra luminal lesions under endobronchial ultrasound, stent treatment for stenosis, laser abrasion for tumors.
- Lung transplantation for benign progressive lung diseases utilizing brain-death donor or living donor.

Anesthesiology, Pain and Palliative Care Medicine

- Anesthesia and Perioperative management
- Palliation of symptoms due to cancer progression and/or cancer treatment.
- Treatment against painful conditions, e.g. CRPS

Urology

- Adrenal tumor-laparoscopic adrenalectomy (robot assisted)
- Renal cell carcinoma-laparoscopic nephrectomy (robot assisted)
- Renal cell carcinoma-robotic-assisted laparoscopic partial nephrectomy
- Upper tract urothelial carcinoma-laparoscopic nephroureterectomy (robot assisted)
- Bladder cancer-transurethral resection
- Prostatic cancer-robotic-assisted laparoscopic prostatectomy
- Varicocele-Microsurgical Varicocelectomy
- Azoospermia-testicular sperm extraction
- Prostate cancer-diagnosis and treatments
- Bladder cancer-robotic-assisted laparoscopic radical cystectomy and ileal conduit, neobladder
- Testicular cancer-operation and chemotherapy
- Penile cancer-operation
- Obstructive azoospermia-Vasovasostomy
- Urolithiasis-extracorporeal shock wave lithotripsy
- Urolithiasis-endoscopic treatment

- Male infertility-diagnosis and treatments

Emergency and Critical Care Medicine

- Diagnosis and treatment of severe sepsis/septic shock
- Treatment with extracorporeal membrane oxygenation (ECMO)
- Critically ill patients in all area, multiple trauma, acute organ dysfunction (cardiac, pulmonary, renal, hepatic and multiple organ dysfunction)
- Transportation of patient with artificial organ support (repatriation) (acceptance from the airport and returning to the country of origin)

Orthopedic Surgery

- Rigid anterior fixation with screw for cervical spondylosis
- Diagnostic imaging of lumbar nerves in spinal canal stenosis
- Intervertebral fusion with platelet-rich plasma
- Total en bloc spondylectomy for malignant spinal tumor
- Minimum invasive hip arthroplasty
- Diagnosis and treatment of Complex Knee Ligament Injury
- Platelet-rich plasma injection for ankle disorders
- Percutaneous aponeurectomy for Dupuytren's Contracture
- Treatment for Performing Artists Based on Performing Arts Medicine
- Extracorporeal Shock Wave Therapy for Orthopedic field

Ophthalmology

- Retinal Photocoagulation
- Vitreous Surgery
- Scleral Buckling
- Intravitreal injection
- Photodynamic Therapy
- Cataract Surgery
- Glaucoma Surgery

Dermatology

- Diagnosis and treatment of severe skin diseases
- Diagnosis and treatment of skin cancers
- Diagnosis and treatment of autoimmune blister diseases
- Diagnosis and treatment of psoriasis
- Diagnosis and treatment of common diseases, from atopic dermatitis to dermatomyositis

Otorhinolaryngology, Head and Neck Surgery

- Diagnosis and treatments for head & neck tumors, such as parotid gland tumors, maxillary cancer, oral cancer, pharyngeal cancer, laryngeal cancer, ear canal cancer and thyroid cancer
- Concurrent chemoradiotherapy for advanced head & neck cancer aiming for organ preservation
- Immunotherapy for advanced head and neck cancer using NKT cells
- Endoscopic surgery for nasal and paranasal tumors including skull base
- Diagnosis and treatment of allergic rhinitis and eosinophilic sinusitis, including immunotherapy
- Microlaryngoscopy, Phonosurgery and diagnosis and treatments for laryngopharyngeal reflux disease

Dentistry and Oral-Maxillofacial Surgery

- Tumor of oral cavity (oral cancer), temporomandibular joint arthrosis (temporomandibular disorder)
- Inflammation (osteitis of jaw, phlegmon)
- Jaw deformity (progenia, prognathia)
- Congenital abnormality (cleft lip, alveolus and palate)
- Trauma (lacerated wound, tooth dislocation, maxillofacial bone fracture)
- Disease of oral mucosa (oral lichen planus)
- Cyst, implant treatment

Plastic, Reconstructive, and Aesthetic Surgery

- Hemifacial Microsomia, Crouzon syndrome, Apert syndrome, Pfeiffer syndrome, Treacher-Collins syndrome, Romberg disease, Facial plastic surgery by osteotomy
- Cleft lip and palate, Micrognathia, Jaw deformity
- Craniosynostosis, Facial scar, Burn Scar
- Facial deformity after removal of head and neck cancer, Breast deformity (congenital, acquired)
- Lymphangioma of the Extremities, Intractable ulcer, Ischemic necrosis of the Extremities

Clinical Psychiatry

- | | |
|--|---|
| Comprehensive treatment of treatment refractory mental disorders | <ul style="list-style-type: none"> • Schizophrenia, including dopamine supersensitivity psychosis • Mood and affective disorder • Anxiety disorder, Obsessive compulsive disorders |
|--|---|

Psychopharmacotherapy, Cognitive behavioral therapy, modified Electroconvulsive therapy

Neurology

- Neurocognitive impairment (Alzheimer disease & related disorders, dementia with Lewy bodies e.g.)
- Parkinson disease (drug treatment, rehabilitation, deep brain stimulation, levodopa-carbidopa intestinal gel e.g.)
- Epilepsy
- Neuroimmunological disorders (multiple sclerosis, Neuromyelitis Optica Spectrum Disorder, Myelin Oligodendrocyte Glycoprotein Antibody Associated Disease, myasthenia gravis, Guillain-Barré Syndrome, chronic inflammatory demyelinating polyneuropathy, POEMS syndrome e.g.)
- Movement disorders (botulinum toxin therapy)

Neurological Surgery

- Microscopic and endoscopic skull base surgery

- Endoscopic Surgery for pituitary adenoma, craniopharyngioma, meningioma, Rathke's cleft cyst, chordoma and others
- Deep brain stimulation (DBS) for Parkinsonism and other movement disorders
- Microvascular decompression for trigeminal neuralgia and hemifacial spasm
- Multidisciplinary treatment for gliomas
- Awake surgery for intracranial lesions
- Endovascular surgery for CNS-vascular diseases (aneurysm, arteriovenous malformation and arteriovenous fistula)
- Carotid artery stenting (CAS) for carotid artery stenosis
- Revascularization surgery for Moyamoya disease and other ischemic states
- Surgery for hydrocephalus including endoscopic Third Ventriculostomy (ETV)
- Foramen magnum decompression (FMD) for Chiari type I malformation
- Surgery for spinal cord tumors

Gynecology

Tumors	<ul style="list-style-type: none"> • Uterus-preserving treatment for endometrial cancer with progestin plus metformin • Extended radical surgery for ovarian cancer • Molecular diagnosis of trophoblastic disease for personalized medicine • Multidisciplinary treatment for chemo-resistant choriocarcinoma
Reproductive endocrinology	<ul style="list-style-type: none"> • Minimal invasive surgeries including robot-assisted, laparoscopic, and hysteroscopic surgery for uterine fibroid, endometriosis, and adenomyosis. • Fertility preservation for female cancer survivors using assisted reproductive technology. • Comprehensive treatments combining hormone therapy, laparoscopic surgery, and assisted reproductive technology in women with endometriosis • Abdominal and hysteroscopic surgery for cesarean scar defect in women with cesarean scar disorders.

Obstetrics	
Medical and surgical complications in pregnancy	<ul style="list-style-type: none"> • Diabetes mellitus, thyroid disease, autoimmune disease, hypertension, renal disease, hematologic disease, neurological cerebral Surgery disease, mental disease, cardiac disease, digestive disease, malignant tumor • Safe management of pregnancy and delivery with each Department, e.g. Internal medicine, Surgery, Anesthesiology, ICU
Obstetrical complications	<ul style="list-style-type: none"> • Hypertensive disorders, gestational diabetes mellitus, obstetrical hemorrhage, preterm labor, fetal-growth disorders, multifetal pregnancy
Fetal diagnosis and therapy	<ul style="list-style-type: none"> • Image diagnosing of abnormality fetus by using ultrasonic sound and MRI • Fetal therapy is performed for fetal arrhythmia and Fetus hydrothorax
Pediatrics	
Diagnosis and treatment of pediatric diseases	<ul style="list-style-type: none"> • Allergy, e.g. bronchial asthma, atopic dermatitis and food allergy • Autoimmune diseases and primary immunodeficiencies, Kawasaki disease • Pediatric Infectious disease, Vaccines • Childhood epilepsy, encephalitis, encephalopathy and degenerative brain disease • Neurological disease, e.g. mitochondrial diseases and Rett syndrome • Pediatric cancer, e.g. leukemia, malignant lymphoma and neuroblastoma • Cardiovascular diseases, e.g. congenital heart diseases, myocarditis, cardiomyopathy, and pulmonary hypertension • Endocrine disease, e.g. short stature, growth disorders, diabetes mellitus, gonadal disorders and thyroid diseases • Low-birth-weight neonates, sick neonates and neonates who were delivered by mother with complication disease

Pediatric Surgery	
Diagnosis and treatment of childhood solid cancer and benign tumors	<ul style="list-style-type: none"> • Neuroblastoma • Hepatoblastoma • Rhabdomyosarcoma • Renal tumors (Wilms tumor, RCC, MRTK, CCSK, e.g.) • Ovarian and testicular tumors (Germ cell tumors, teratomas, epithelial tumors) • Lymphatic malformation and vascular malformation • Other tumors originating from the neck, mediastinum, abdomen, and pelvis
Diagnosis and surgical treatment of pediatric gastrointestinal diseases	<ul style="list-style-type: none"> • Hirschsprung disease and related diseases (Hypoganglionosis, MMIHS, CIIP) • Anorectal malformation (atresia ani) • Intestinal failure and short bowel syndrome
Diagnosis and treatment of inflammatory bowel diseases	<ul style="list-style-type: none"> • Ulcerative colitis • Crohn's disease
Diagnosis and treatment of pediatric hepatobiliary disorders	<ul style="list-style-type: none"> • Biliary atresia • Choledochal cyst
Surgical treatment of prenatal and neonatal anomalies	<ul style="list-style-type: none"> • Congenital diaphragmatic hernia • Esophageal atresia, tracheoesophageal fistula • Omphalocele and gastroschisis
Surgical treatment of pediatric urological disorders	<ul style="list-style-type: none"> • Vesicoureteral reflux (including Deflux) • Ureteropelvic Junction Stenosis
Common surgeries for the pediatric population	<ul style="list-style-type: none"> • Inguinal hernia • Hydrocele testis
Laparoscopic and thoracoscopic surgery	<ul style="list-style-type: none"> • Applied in various types of surgery
Diagnostic Radiology	
<ul style="list-style-type: none"> • Imaging examinations using state-of-the-art equipment (MRI, CT, SPCT, PET, ultrasonography) • Diagnostic imaging for MRI, CT, SEPTC, and PET • CT imaging with low radiation exposure and contrast reduction • MRI using deep learning reconstruction to shorten acquisition time and improve image quality • CT and ultrasound-guided needle biopsy • Endovascular treatment of trunk vessels (embolization, coiling) • Venous sampling • Lymphatic embolization 	

Radiation Oncology

- 1.5T MR-guided online adaptive radiation therapy (prostate, liver, pancreas, kidney, LN oligometastasis)
- Ultra-hypofractionation MR-guided stereotactic body RT for prostate cancer, metastatic vertebral tumor
- Intensity-modulated radiation therapy for CNS, Head & Neck, Thoracic, Gastrointestinal, Gynecological, Urological tumors
- Stereotactic body radiation therapy, Stereotactic radiosurgery
- MR-guided brachytherapy for cervical cancer

Pathology

- Expert diagnosis in pulmonary diseases, e.g. lung cancers and non-neoplastic pulmonary diseases
- Anatomic pathology second opinion consultation service in virtually all specialties

Cardiovascular Interventions

Coronary artery disease	<ul style="list-style-type: none"> • Evaluation in the cath labo: Coronary Angiography, • Intracoronary Vascular Ultrasound, fractional flow reserve, • Spasm provocation • Treatment with percutaneous coronary intervention, elective or emergent
Peripheral artery disease	<ul style="list-style-type: none"> • Peripheral angiography • Endovascular therapy • Percutaneous transluminal renal angioplasty
Structural heart disease (in cooperation with cardiovascular surgeons)	<ul style="list-style-type: none"> • Transcatheter aortic valve implantation • MItraClip therapy for mitral regurgitation • Patent foramen ovale closure

Clinical Genetics

- Hereditary Breast and Ovarian Cancer
- Spinocerebellar Degeneration
- Long QT syndrome
- Lynch syndrome
- Myotonic dystrophy
- Familial Mediterranean fever
- Birt-Hogg-Dubé syndrome
- Spinal and Bulbar Muscular Atrophy
- Huntington disease
- Marfan syndrome
- Charcot-Marie-Tooth disease