University Hospital for Tumors, University Hospital Center Sestre Milosrdnice - Zagreb, Croatia

General Information

| New breast cancer cases treated per year | 873 |
| Breast multidisciplinarity team members | 35 |
| Radiologists, surgeons, pathologists, medical oncologists, radiotherapists and nurses |
| Clinical Director: Danko Velimir Vrdoljak, MD, PhD |

Our University Hospital for Tumors and Allied Diseases was established in 1968 as a specialized solid tumors multidisciplinary treatment institution. In 1993 the Institute and Allied Diseases became the University Clinic for Tumors, in 2010 the Institute was merged with the Clinical Hospital Center Sestre Milosrdnice. Our University Hospital for Tumors mostly treats breast and colorectal cancer pathology. Followed by, Head and Neck and Gynecological pathology. We treat over 1000 cases of breast tumors annually. Diagnostic, surgical, medical oncology, radiotherapy, rehabilitation, supportive and palliative care, psychological support facilities are available on site. Diagnosis of suspicious breast lesions is carried out through 'One day clinic'. The hospital is involved in the National Breast Cancer Screening programme. Apart from our daily practice, clinical research is stimulated and a general oncological journal 'Libri oncologici' has been published since 1968.

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Web-site: http://www.kbcsm.hr/hr/klinike/klinika-za-tumore/
Available services

- Radiology
- Breast Surgery
- Reconstructive/Plastic Surgery
- Pathology
- Medical Oncology
- Radiotherapy

- Nuclear Medicine
- Rehabilitation
- Genetic Counselling
- Data Management
- Psycho-oncology
- Breast-oncology

- Social Workers
- Nutritional Counselling
- Survivorship Groups
- Sexual Health Counselling
- Supportive and Palliative Care
- Integrative Medicine

Radiology

- Dedicated Radiologists: 8
- Mammograms per year: 12000
- Breast radiographers
- Screening program
- Verification for non-palpable breast lesions on specimen
- Axillary US/US-guided FNAB
- Clinical Research

Available imaging equipment
- Mammography
- Ultrasound
- Magnetic Resonance Imaging (MRI)

Available work-up imaging equipment
- Computer Tomography
- Ultrasound
- Magnetic Resonance Imaging (MRI)
- PET/CT scan

Primary technique for localizing non-palpable lesions
- Hook-wire (or needle localization)
- Charcoal marking/tattooing
- ROLL: radio-guided occult lesion localization

Available breast tissue sampling equipment
- Stereotactic Biopsy (Mammography guided)
- Core Biopsy (Tru-cut)
- Vacuum assisted biopsy
- Ultrasound-guided biopsy
- Fine-needle aspiration biopsy (FNAB, cytology)
- Core Biopsy
- Vacuum assisted biopsy
- MRI-guided biopsy
- Core Biopsy
- Vacuum assisted biopsy

Breast Surgery

- New operated cases per year (benign and malignant): 1084
- Dedicated Breast Surgeons: 10
- Surgeons with more than 50 surgeries per year: 10
- Breast Surgery beds: 50
- Breast Nurse specialists: 4
- Intra-operative evaluation of sentinel node
- Reconstruction performed by Breast Surgeons
- Clinical Research

Primary technique for staging the axilla
- Axillary lymph node dissection
- Sentinel lymph node biopsy:
  - Blue dye technique
  - Radio-tracer technique
- Blue dye + Radio-tracer
- Axillary sampling
Reconstructive/Plastic Surgery

- Reconstructive/Plastic surgeons
- Immediate Reconstruction available

Type of breast reconstructive surgery available
- Remodelling after breast-conserving surgery
- Reconstruction after mastectomy:
  - Two-stage reconstruction (tissue expander followed by implant)
  - One-stage reconstruction
- Autogenous tissue flap
  - Latissimus dorsi flap
  - Transverse rectus abdominis (TRAM)
  - Free-flaps (free TRAM, DIEP, SIEA, gluteal, etc.)
- Surgery on the contralateral breast for symmetry
- Breast reduction

Pathology

- Dedicated Breast Pathologists

Available studies
- Cytology
- Haematoxylin & eosin section (H&E)
- Surgical specimen
- Sentinel node
- Core biopsy
- Frozen section (FS)
- Surgical specimen
- Sentinel node
- Immunohistochemistry stain (IHC)
  - Estrogen receptors
  - Progesterone receptors
  - HER-2
  - Ki-67

Other special studies available
- Fluorescence in-situ Hybridization for HER-2 gene (FISH)
- Oncotype Dx (21-gene assay)
- MammaPrint (70-gene microarray)
- Prediction Analysis of Microarray 50-gene set (PAM 50)
- BRCA testing

Parameters included in the final pathology report
- Pathology stage (pT and pN)
- Tumour size (invasive component in mm)
- Histologic type
- Tumor grade
- ER/PR receptor status
- HER-2/neu receptor status
- Peritumoural/Lymphovascular invasion
- Margin status
- Ki 67

Medical Oncology

- Dedicated Breast Medical Oncologists
- Outpatient systemic therapy
- Clinical Research
Radiotherapy

- Dedicated Radiation Oncologists
- Clinical Research

Available techniques after breast-conserving surgery (including experimental)

- Whole-Breast RT (WBRT)
- Partial breast irradiation (PBI):
  - External beam PBI
- Interstitial brachytherapy
- Targeted brachytherapy (MammoSite, SAVI applicator, other devices)
- Intra-operative RT (IORT)

Multidisciplinary Meeting (MDM) / Tumour Board (TB)

Regular MDM/TB for case management discussion

- Twice a week
- Weekly
- Every two weeks
- Other Schedule

Cases discussed at MDM/TB

- Preoperative cases
- Postoperative cases

Specialties/services participating in MDM/TB

- Radiology
- Breast Surgery
- Reconstructive/Plastic Surgery
- Pathology
- Medical Oncology
- Radiotherapy
- Genetic Counselling
- Breast Nurse Service
- Psycho-oncology

Further Services and Facilities

Nuclear Medicine

- Lymphoscintigraphy
- Bone scan
- Positron Emission Tomography (PET)
- PET/CT scan

Rehabilitation

- Prosthesis service
- Physiotherapy
- Lymph-oedema treatment

Genetic Counselling

- Specialist Providing Genetic Counselling/Risk assessment service:
  - Dedicated Clinical Geneticist
- Medical Oncologist
- Breast Surgeon
- General Surgeon
- Gynaecologist
- Genetic Testing available
- Surveillance program for high-risk women

Data Management

- Database used for clinical information
- Data manager available
### Contact details

#### Clinical Director

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<thead>
<tr>
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<th>Position</th>
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#### Radiology

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#### Breast Surgery

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#### Reconstructive Surgery

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#### Radiotherapy

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From airport:
Head southwest on Pleso. Turn right onto Pleso (D408). Turn right onto Velikogoricka (D30) toward Zagreb/Velika Mlaka. Turn left onto Avenija Dubrovnik toward Centar. Turn right onto Jadranska avenija toward Centar. Turn left onto Savska cesta. Turn right onto Prilaz Baruna Filipovica. Turn left onto Ulica Željka Maricica. Arrive at Ulica Željka Maricica. Your destination is on the right. If you reach Ilica, you’ve gone too far.

By train:
Take tram 2 or 6 direction Crnomerec, stop at 'Sveti Duh' station.

Last modified: 20 January 2016