#### Scope of Services

# Medical Oncology and Haematology

- Chemotherapy
- Immunotherapy
- · Bone Marrow Transplant
- Paediatric Oncology
- Geriatric Oncology
- · Onco critical Care

#### **Surgical Oncology**

- Head and Neck
- Breast
- · GI, Lung and Thoracic
- Cervical and Gynaecology
- Prostate and Genitourinary
- Colorectal
- · Peritoneal
- · Brain, Spine and Bone
- · Liver and Pancreas

### Plastic and Reconstructive Surgeries

#### **Radiation Oncology**

· Radiation Therapy

#### **Nuclear Medicine**

- · PET CT
- · SPECT
- High Dose Radionuclide Therapy

#### **Pain and Palliative Care**

# Radiation Oncology

Dr. Sandeep Jain

#### Nuclear Medicine

Dr. Sunny Gandhi

## Pain Management

Dr. Milan Mehta

### Cardiology

Dr. Ketan Vekariya

#### Medical Oncology and Haematology

#### **Medical Oncology and Haematology**

Dr. Pankaj Shah

Dr. Manohar Chari

Dr. Mithun Shah

Dr. Nahush Tahiliani

# **Bone Marrow Transplant and**

#### Haematology

Dr. Nidhi Jain

Dr. Akanksha Garg

#### Onco-critical Care

Dr. Bikas Mishra

#### **Surgical Oncology**

#### **HEAD AND NECK CANCER**

Dr. Mahesh H. Patel

Dr. Siddharth Shah

Dr. Dipen Patel

Dr. Supreet Bhatt

#### **GYNAECOLOGICAL CANCER**

Dr. Ava Desai

Dr. Mona Shah

#### G.I., LUNG AND THORACIC CANCER

Dr. Mahesh D. Patel

#### **BREAST CANCER**

Dr. Priyanka Chiripal

Dr. Neelam Ahirwar

#### **UROLOGICAL CANCER**

Dr. Mukesh Patel

Dr. Raj Patel

#### **NEURO CANCER**

Dr. Dipak Patel

Dr. Kalpesh Shah

#### **SPINE CANCER**

Dr. Hitesh Modi

#### **ORTHOPEDIC CANCER**

Dr. Jaymin Shah

# PLASTIC AND RECONSTRUCTIVE SURGERY

Dr. Raghuvir Solanki

Dr. Jatin Bhojani

# Bone Marrow Transplant Unit (BMT) at ZCC

The Hematology Department at Zydus Cancer Centre offers treatment for all blood-related disorders including bone marrow or stem cell transplant. The BMT unit has 7-bedded indoor facility located at the 3rd floor of the hospital which is only accessible to the patient of hematology and the BMT staff.

#### Salient Features

- Gujarat's Largest BMT with 7 Beds
- Terminal HEPA in BMT and Corridor
- Room is furnished like an ICU

The BMT unit has a dedicated and extremely experienced team of BMT Physicians, Hemato-oncologist, Medical oncologist, Radiation Oncologist, Transfusion medicine expert, Hemato-Pathologist, Trained transplant nurses, Infection control specialist, Physiotherapist, dietician, counselors and BMT coordinator who work together across a range of specialty areas. They ensure that each and every patient's journey from diagnosis, treatment and long term follow up is integrated, personalised and seamlessly coordinated for the best possible treatment outcomes.



To book your appointment, call: +91 79 66190201 / 372



# **Zydus Cancer Centre**

Zydus Hospitals Road, S.G. Highway, Thaltej, Ahmedabad - 380 054, Gujarat. Board Line: 079-71 666 000

www.zyduscancercentre.com







# Bone Marrow Transplant Centre



# Bone Marrow Transplantation (BMT) or Stem Cell Transplantation (SCT)

#### **Bone Marrow**

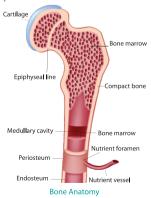
Bone marrow is the soft spongy tissue that lies within the hollow interior of long bones. Bone marrow in large bones produces new blood cells. The bone marrow contains stem cells. These are cells at a very early stage of development that develop into the three different types of blood cell. When the cells are fully matured, they are released into the bloodstream. Hence bone marrow works as a factory for blood.

When things go wrong in the blood e.g. blood cancer (leukaemia), aplastic anaemia (empty bone marrow) its origin is in the stem cells in the bone marrow. Hence, bone marrow transplantation or stem cell transplantation can be a curative treatment for such conditions.

### **Bone Marrow Transplant**

Bone marrow transplant procedure is performed not only for cancerous conditions like blood cancer, but also for genetic conditions like Thalassemia. Here the cancerous or genetically abnormal stem cells are eradicated by chemotherapy and immuno suppressive medicines and new functionally normal stem cells are given which later populate the bone marrow and blood with non cancerous cells and genetically normal cells.

The two terms 'bone marrow' and 'stem cell' transplants are sometimes used interchangeably. In paediatric age group and earlier in adult age group, bone marrow acquired by aspiration served as the source of stem cells, hence the terminology of BMT was used. Now, in adults, we use stem cells extracted from the blood, on a machine. All bone marrow transplants are stem cell transplants, but not all stem cell transplants.



# Conditions treated with BMT in Adults and Children Malignant Conditions

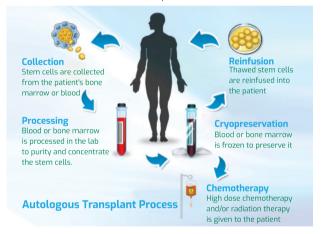
- Leukemias (Acute Myeloid Leukemia and Acute Lymphoblastic Leukemia)
- Relapsed Hodgkin's and Non-Hodgkin's Lymphoma
- Multiple Myeloma
- Solid-Tumours (Cancers) such as high-risk Neuroblastomas, relapsed Ewing Tumours and relapsed Testicular Tumours

### **Non-malignant Conditions**

- Thalassemia Major
- Sickle Cell Anaemia
- Severe Aplastic Anaemia
- Immune Deficiency Disorders
- Autoimmune Diseases

# **Types of Bone Marrow Transplants offered:**

**Autologous BMT** — The patients' own harvested cells are transfused back into the body after treatment



**Allogeneic BMT** — Cells from a related or unrelated donor are transplanted to the patient after treatment.

# Donors for Allogeneic Bone Marrow Transplants include the following:

- Matched Related Donor
- Matched Unrelated Donor
- Haploidentical: Half-matched Related Donor
- Umbilical Cord Blood Transplant: A Cord blood transplant uses cells collected from the blood of a newborn's umbilical cord

# Procedure of Stem Cell Transplant

Before stem cell transplant, stem cells are collected from either the bone marrow or the blood. Patient is given high doses of chemotherapy, usually over a few days. Sometimes, radiotherapy is also given to the whole body, known as total body irradiation (TBI). While destroying any remaining cancer cells, the high doses of chemotherapy also destroy the stem cells in the bone marrow. After the chemotherapy, patient is given the stem cells that were collected before the treatment. These stem cells start producing mature blood cells again.

# **Preparing yourself for Transplant**

You will undergo a number of tests before the treatment. You will be explained what they are and why they are needed. Some of the tests you undergo may depend on the type of cancer or leukaemia you have and the stage of your disease. Once you understand what the treatment involved, you can take time to think things over and make practical arrangements. You will be admitted for the transplant; this may take several weeks. After the chemotherapy, there is a period of neutropenia. During which period, patients can be unwell requiring several medicines to prevent and treat infections and nutritional supplements etc.

# Post Transplant Care

After the transplant is completed and patient is discharged, he / she needs to continue some medicines to keep the transplant working.

## **OUR EXPERT**



Dr. Nidhi Jain

DM (Hematology), MD (Medicine) Consultant - Hematology Hemato - Oncology and Bone Marrow Transplant at Zydus Cancer Centre



Dr. Akanksha Garg

MD Pediatrics PDCC Hemato - Oncology DM Clinical Hematology