

## 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 Genito-urinary
- 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

### Anaesthesiology

Dr. Rajendra Bagwade  
Dr. Yogesh Tank  
Dr. Dharmendrasinh Chavda  
Dr. Jignesh Mori

### Cardiology

Dr. Ketan Vekariya

### Internal Medicine

Dr. Rushikesh Shah

### Medical Oncology and Haematology

#### Medical Oncology and Haematology

Dr. Pankaj Shah  
Dr. Dileep Srinivasan  
Dr. Mithun Shah  
Dr. Nahush Tahiliani

#### Haematology and Bone Marrow Transplant

Dr. Nidhi Jain  
**Onco critical care**  
Dr. Mrugank Bhavsar

### Surgical Oncology

#### Head and Neck

Dr. Mahesh H Patel  
Dr. Siddharth Shah

#### GI, Lung and Thoracic

Dr. Mahesh D Patel  
**GI, Peritoneal, Gynaecology**  
Dr. Aditi Bhatt

#### Breast Cancer

Dr. Priyanka Chiripal

#### Uro Oncology

Dr. Mukesh Patel  
Dr. Kamlesh Patel  
Dr. Kaustubh Patel

#### Neuro Oncology

Dr. Dipak Patel  
Dr. Kalpesh Shah

#### Spine Cancer

Dr. Hitesh Modi  
**Ortho Onco**  
Dr. Jaymin Shah

### Plastic and Reconstructive Surgery

Dr. Raghuvir Solanki  
Dr. Jatinkumar Bhojani

### Radiation Oncology

Dr. Sandeep Jain

### Nuclear Medicine

Dr. Sunny Gandhi

### Pain Management

Dr. Milan Mehta

### Radiology

Dr. Ameet Panchal  
Dr. Shweta Thakkar

## 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.



Please book your appointment:

+91 72290 47022 / 21



### Zydus Cancer Centre

Zydus Hospitals Road, S.G. Highway,  
Thaltej, Ahmedabad - 380 054, Gujarat.

Board Line: 079-71 666 000



# Bone Marrow Transplant Centre



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

### Bone Marrow

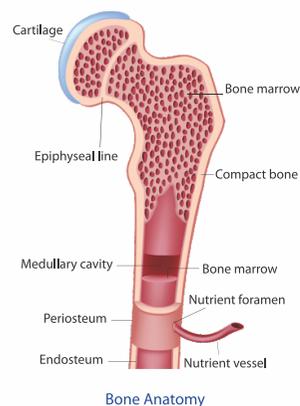
Bone marrow is the soft spongy tissue that lies within the hollow interior of long bones. Bone marrow in large bones produces new blood cells. The bone marrow contains stem cells. These are cells at a very early stage of development that develop into the three different types of blood cell. When the cells are fully mature, 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 are bone marrow transplants.



### Conditions treated with BMT in Adults and Children

#### Malignant Conditions

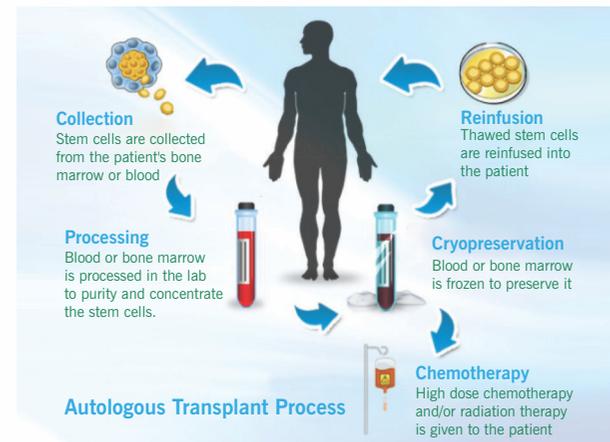
- Leukemias (Acute Myeloid Leukemia and Acute Lymphoblastic Leukemia)
- Relapsed Hodgkin's and Non-Hodgkin's Lymphoma
- Multiple Myeloma
- Solid-Tumours (Cancers) such as high-risk Neuroblastomas, relapsed Ewing Tumours and relapsed Testicular Tumours

#### 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  
Cance Centre