



BMTCN™ TEST CONTENT OUTLINE (TEST BLUEPRINT)


I. Basic Concepts and Indications for Transplantation — 10%

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- A. Basic concepts of transplantation
 1. hematopoiesis
 2. immunology
 3. role of the caregiver
 4. goals of therapy (e.g., graft vs. disease effect, hematologic/immune reconstitution after high dose chemotherapy/radiotherapy, marrow ablation)
 - B. Indications of transplantation
 1. malignant disease
 2. non-malignant disease (e.g., autoimmune, genetic, metabolic, hematologic)

II. Types of Transplants and Sources of Stem Cells — 8%

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- A. Types of transplants
 1. autologous
 2. allogeneic
 3. other cellular therapies (e.g., donor lymphocyte infusion, dendritic cells)
 - B. Sources of stem cells
 1. peripheral blood
 2. bone marrow
 3. umbilical cord blood


III. Pre-Transplant Care — 10%

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- A. Recipient eligibility and management
 1. eligibility criteria
 2. recipient evaluation and management
 3. recipient and caregiver education
 - B. Donor selection and care
 - C. Stem cell procurement
 1. stem cell mobilization
 2. stem cell collection and storage


IV. Preparative Regimens and Stem Cell Infusion — 15%

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- A. Preparative regimens
 1. intensity of therapy (e.g., myeloablative, reduced intensity, and non-myeloablative)
 2. chemotherapy
 3. radiation therapy
 4. biotherapy
 5. immunotherapy
 6. targeted therapies
 - B. Stem cell infusion
 1. fresh vs. cryopreserved
 2. infusion management
 3. hematologic compatibilities


V. Graft-Versus-Host Disease (GVHD) Prevention and Management — 15%

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- A. Acute GVHD
 - B. Chronic GVHD


VI. Post-Transplant Issues — 26%

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- A. Infection prevention and management
 - B. Hematologic complications (e.g., engraftment, pancytopenia)
 - C. Hydration and electrolyte complications
 - D. Gastrointestinal complications
 - E. Nutritional complications
 - F. Hepatorenal complications
 - G. Neurologic complications
 - H. Genitourinary complications
 - I. Endocrine complications
 - J. Cardiopulmonary complications
 - K. Dermatologic complications
 - L. Dental complications
 - M. Ocular complications
 - N. Musculoskeletal complications
 - O. Psychosocial complications
 - P. Graft rejection or failure
 - Q. Disease relapse
 - R. End of life

VII. Survivorship Issues — 8%

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- A. Secondary malignancy
 - B. Psychosocial issues
 - C. Fertility
 - D. Sexuality
 - E. Quality of life
 - F. Follow-up care

VIII. Professional Practice — 8%

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- A. Ethical and legal issues (e.g., informed consent, advance directives, confidentiality)
 - B. Clinical trials
 - C. Scope and standards of practice
 - D. Accreditation standards (e.g., Foundation for Accreditation of Cellular Therapies (FACT) accreditation)
 - E. Continuous quality improvement
 - F. Professional boundaries
 - G. Compassion fatigue and moral distress
 - H. Chemotherapy and biotherapy competence
 - I. Sources of data for evidence-based practice

Please note: ONCC uses generic names of drugs used in treatment, not brand names, on tests.