

Introduction to Pathology

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The Pathology Department

Pathology



Anatomic Pathology (AP)

Surgical specimens
Autopsy
Cytology

Clinical Pathology (CP)

Transfusion Medicine
Hematopathology
Chemistry
Microbiology
Cytogenetics
Molecular Pathology



Anatomic Pathology

- Main areas:

- Surgical pathology (50,000 specimens)

- Derm
- GI
- Breast
- GYN, etc

- Cytology

- Gyn
- Non-gyn

- Autopsy

People:

20-25 Attendings

>30 Residents

5-9 Fellows

>25 Technologists



Clinical Pathology = Laboratory Medicine

- Four Main Laboratories:
 - 1. Chemistry
 - 2. Blood Bank / Transfusion Medicine
 - 3. Microbiology
 - 4. Hematology / Hematopathology
 - Other: Cytogenetics
 - Lab Sendouts: 120,000 annually
-



Blood Bank / Transfusion Medicine

- ❑ Transfuse 18000 red cell units a year
- ❑ Provides transfusion support & stem cell therapies for BIDMC patients (Gryzmish 5)
- ❑ Location: 2nd CC, 3rd Finard
- ❑ Resident on call: Pager 30003
- ❑ Questions:

Utilization of blood products

Transfusion reactions

Apheresis procedures



Microbiology

- Diagnosis of infectious diseases:
 - Bacteriology
 - Mycobacteriology
 - Virology
 - Parasitology
 - Mycology
 - Molecular microbiology
 - Serology
 - Approximately 211,000 specimens a year
 - Location: 3rd Finard
 - Resident on call: Pager 30004
 - Questions
 - Sample adequacy
 - Culture/sensitivity interpretation
-



Hematology / Hematopathology

- CBCs: 500,000/year
- Coagulation testing: 140,000/year
- Blood / Bone Marrow/ Lymph nodes /
Flow cytometry
- Urinalysis/ Body Fluids
- Location: 3rd Finard, 2nd CC
- Resident on call: Pager 30005
- Questions

Bone marrow biopsy results

Coagulation testing/interpretation

CBC results



Clinical Chemistry

- > 4.5 million tests a year (>10,000 tests/day, 3000 tubes/day)
 - >125 assays
 - Enzymes
 - Hormones
 - Serology
 - ABGs
 - Therapeutic drug monitoring
 - Toxicology
 - SPEP/UPEP
 - Electrolytes
 - Location: 3rd Finard, 2nd CC
 - Resident on call: Pager 30002
 - Questions: Test methodology, interferences, and interpretation
-

Resources: On-line lab manual

Beth Israel Deaconess Medical Center

Web eMail Phone Pager Calendar Emergency Numbers

Search GO!

Advanced Search

CareWeb
Community Meditech
eBenefits
Cyberprise
PSN EIS
Performance Manager
Online Reports
Find a Doc
STARS
PatientSite
NEHEN
PeopleSoft
MyCourses
New Innovations
Web Tools

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Clinical Portal
General
Patient Ed
Research

Clinical Resources

- [ACS NSQIP](#)
- [Antimicrobial Susceptibilities \(BIDMC\)](#)
- [Call Schedules](#)
- [Cardiology Resources](#)
- [Continuing Medical Education](#)
- [Diagnosis and Procedure Codes](#)
- [Drug Information](#)
- [Easy Access Phone Numbers for Clinicians](#)
- [Emergency Dept Call-in \(BIDMC\)](#)
- [Faculty Resources](#)
- [Hospitalist Resources](#)
- [Housestaff Resources](#)
- [Medical Library Services](#)
- [Medical Student Resources](#)
- [Micromedex](#)
- [Pharmaceutical Billing Codes](#)
- [Pharmacy Locator](#)
- [Practice Resources](#)
- [UpToDate](#)

Clinical Manuals and Forms

- [Bone Mineral Density Form](#)
- [Cardiac MR Center Forms](#)
- [Clinical Note Templates](#)
- [Infection Control Manual](#)
- [Lab Manual](#)
- [Organizational Policies, Procedures, Guidelines, and Directives \(PPGD\)](#)

Patient Care Services

- [2005-2006 Resident Directory](#)
- [CEU Courses](#)
- [CINAHL](#)
- [Direct Line Newsletter](#)
- [Ethics Support Service](#)
- [GeroNurseOnline - Geriatrics & Nursing Information](#)
- [Honoring Patient Preferences](#)
- [How-To information \(Redbook\)](#)
- [Impac \(Radiation Oncology\)](#)
- [iShift @ BIDMC](#)
- [Lippincott Nursing Center](#)
- [Lippincott/Springhouse Nursing Collection](#)
- [Nursing](#)
- [OneStaff via MetaFrame](#)
- [Online Nursing Journals](#)
- [Palliative Care Consult Service](#)
- [Professional Nursing Organizations](#)
- [Translated Questions and Phrases](#)

References

- [Avian Influenza Information Links](#)
- [Bioterrorism](#)
- [Chemotherapy Dosing Calculator](#)
- [Clinical Preventive Services \(USPSTF\)](#)
- [Critical Value Notification Policy](#)
- [Educational Technology](#)
- [Go Ahead and Ask! Hand Hygiene](#)
- [Emergency Management](#)
- [Handheld Computing Resources](#)

Search
 GO!
[Advanced Search](#)

- CareWeb
- Community Meditech
- eBenefits
- Cyberprise
- PSN EIS
- Performance Manager
- Online Reports
- Find a Doc
- STaRS
- PatientSite
- NEHEN
- PeopleSoft
- MyCourses
- New Innovations
- Web Tools



Beth Israel Deaconess Medical Center Laboratory Manual

Search for a Clinical Laboratory Test:
(For best results type the first few letters of a test name)

Alphabetic Listing of Clinical Laboratory Tests

[1](#) [5](#) [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#)
[Y](#) [Z](#)
















- Note - More Stringent [Sample Labeling Policy](#) in effect as of Oct. 1, 2004
- Please Help Us Improve This Manual - [Take a VERY BRIEF Survey!](#)

- [Overview of the clinical laboratory](#)
- [Laboratory personnel and phone numbers](#)
- [How to order laboratory tests](#)
- [Specimen collection](#)
- [Laboratory reports](#)
- [Critical values](#)
- [How to use the CCC system to look up results](#)

Description of Pathology Department services:

Search


 GO![Advanced Search](#)

-  CareWeb
-  Community Meditech
-  eBenefits
-  Cyberprise
-  PSN EIS
-  Performance Manager
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[Y Z](#)

NTproBNP

- Hormone produced by ventricles which is used as a marker of Congestive Heart Failure.

Specimen	Serum
Amount	0.25 mL
Container	Serum separator tube  <small>Photo: Daniel Schreiber, MD</small>
Set Up Times	24 hours, 7 days a week
Routine Results Available	Within 4 hours
View Results	Chemistry system
Units	pg/mL
Reference Range	Reference ranges vary with gender and age. See "Comments" below.
Comments/Medical Significance	Reference ranges vary with gender and age. For screening outpatients, the manufacturer recommends maximizing sensitivity (and negative predictive value) by using two thresholds based on age. <125 pg/mL for patients younger than 75 <450 pg/mL for patients age 75 and older For acute dyspnea in ED patients, at 35% prevalence, study show that NTproBNP values <450 pg/mL have 99% negative predictive value for CHF >1000 pg/mL have 77% positive predictive value for CHF For more information, see link below.
Link to Additional Test Info	Click here for more information.
Reflex test?	NO
Panel test?	NO
Medical Necessity Required?	NO
Director Responsible	Gary Horowitz, MD

Resources: Online Policies, Procedures, Guidelines

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Web eMail Phone Pager Calendar Emergency Numbers

Beth Israel Deaconess Clinical Portal General Patient Ed Research

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CareGroup Portal - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites Mail Print Write People


Address <http://www.home.caregroup.org/default.asp> Go Links >>

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Web Tools

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Organizational Policies, Procedures, Guidelines & Directives (PPGD)

Search manuals: Search

Organizational PPGD's	Bylaws and Plans	Department Specific PPGD's
<ul style="list-style-type: none"> • BIDMC Policy Manual • Clinical Practice Guidelines • Code of Conduct • Critical Care Practice Manual • Environment of Care Manual • Infection Control Manual • Manual of Clinical Practice • Medical Staff Discharge Summary Guidelines • Patient Safety Related Policies & Standards • Pharmacy Clinical Guidelines • Pharmacy Policies & Procedures Manual • Phlebotomy Manual • Point of Care Testing Manual • Radiation Safety 	<ul style="list-style-type: none"> • Allied Health Provider Credentialing • Compliance Policy Manual • Medical Staff By-Laws • Medical Staff Credentialing • Medical Staff Rules & Responsibilities • Patient Care Assessment Plan • Performance Improvement 	<ul style="list-style-type: none"> • Case Management Manual • Continuing Education • Drug Information • Emergency Department Guidelines • Finance Manual • GME Manual • Intrapartum Manual • Manual of Neonatal Care Practices • Neonate Formularies • Nursing Manual • Pathology • Pathology - Chemistry Lab • Pathology - Lab Control • Pathology - Surgical Pathology Manual • Patient Care Services Administrative Manual • PeriOp (100) General Policies • PeriOp (200) OR Policies • PeriOp (300) Peri Anesthesia Care

Slide 13 of 18 Profile English (U.S.) Trusted sites

Start CareGroup Portal - Mi... Microsoft PowerPoint - [I... 2:22 PM

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- CareWeb
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- Employee Connection
- Manager Self Service
- Cyberprise
- PSN EIS
- Performance Manager
- Online Reports
- Find a Doc
- PatientSite
- NEHEN
- PeopleSoft
- MyCourses
- New Innovations
- Web Tools

- [1200-2 Administration of Blood Components - OVERVIEW](#)
- [1200-3 Administration of Blood Components - EQUIPMENT](#)
- [1200-5 Administration of Blood Components - COMPUTER SIGNOUT](#)
- [1200-6 Administration of Blood Components - BEDSIDE SIGNOUT](#)
- [1200-7 Administration of Blood Components - COMPATIBILITY CHART](#)
- [1200-8 Administration of Blood Components - INITIATION / MONITORING OF TRANSFUSION](#)
- [1200-9 Administration of Blood Components - Infusion Rate Guidelines](#)

PeriOp (200) OR Policies (Perioperative Services)

- [200-203 Blood and Blood Products, Intraoperative Delivery & Administration](#)
- [200-203-Appendix 1 Transfusion Reaction Investigation Form](#)

Trauma Center Policy Manual (Trauma Center)

- [Massive Transfusion Protocol](#)
- [Transfusion](#)

Procedures

Nursing Manual (Nursing Manual)

- [1200-4 Administration of Blood Components - PROCEDURE](#)

Pathology (Laboratory Medicine)

- [Massive Hemorrhage Transfusion Protocol](#)

Guidelines

Clinical Practice Guidelines (Clinical Practice Guidelines)

- [Rhlg Immunoprophylaxis Following Transfusion of Rh\(D\)-Positive Blood Products to Rh\(D\)-Negative Pati](#)
- [Transfusion Practice Guidelines - Adult Inpatient](#)

Nursing Manual (Nursing Manual)

- [1200-13 Guidelines for Consent for Transfusion of Blood](#)





Take home

- If you have a question about a lab test or interpretation, please call us!
 - A pathology resident is available 24/7
 - Clinical Pathology:
 - Chemistry: 30002
 - Blood Bank: 30003
 - Microbiology: 30004
 - Hematology: 30005
 - Clinical pathology resident on call: 32093
 - Anatomic Pathology:
 - East Campus: 32094
 - West Campus: 92826
- 