

December 1995

Issue Number 3

**Stability time for
prothrombin time
(PT) assays**

Effective immediately, the stability time for prothrombin time (PT) assays is changed from 2 hours after collection to 24 hours after collection, if the tube cap is not removed. This change is based on a careful study conducted by the Core Laboratory. Do not allow the specimens to warm above room temperature (75° F) before analysis. Keep the cap on the original tube and do not centrifuge the specimen.

This change is only for the prothrombin time (PT) and not for the partial thromboplastin time (PTT). The PTT must be received within 2 hours of collection.

Please make this correction to page 324 of the Ancillary Services Handbook in the **STORAGE INSTRUCTIONS: and CAUSES FOR REJECTION:** sections under the Prothrombin Time heading by changing the 2 hours to 24 hours.

*Robert B. Brainard, Ph.D.
Clinical Chemist*

**Standard Practice
Guidelines for
Microbiology**

Microbiologists from UNC Hospitals, Chapel Hill, Durham Regional Hospital, Wake Medical Center and Rex Hospital have been meeting and are in the process of developing community standard practice guidelines for submitting, testing and reporting microbiology results. It is our intent to utilize these guidelines to standardize microbiology practices such that physicians practicing in the area will be presented with uniform ordering and reporting in microbiology. If you have any suggestions or would like to participate in this process, please call me at 783-3063.

Karl T. Kleeman, Ph.D.

**New Practice
Guidelines for
Wounds and
Normally Sterile
Fluid Cultures**

Tissues, aspirates, and body fluids are the specimens of choice for routine aerobic cultures. Swabs are convenient for collecting specimens but tend to be contaminated with normal skin flora during collection. To enhance the sensitivity of cultures from tissues, aspirates and body fluids, broth media is set up in addition to the standard media plates. To reduce the reporting of clinically confusing normal flora, broths will no longer be set up on swab specimens unless collected at surgery. Standard media plates will continue to be used for all cultures.

Karl T. Kleeman, Ph.D.

New Practice Guidelines for Antibiotic Susceptibility Testing

To control costs and to focus on clinically significant microorganisms, new susceptibility testing policies will be instituted. With certain microbial isolates of questionable clinical significance, such as coagulase negative staphylococci, antibiotic susceptibilities will not be done initially. The microorganisms will be reported and the clinician given the opportunity to order susceptibility testing if appropriate. Reports will indicate "telephone the laboratory at ext 3051 within 24 hours if the susceptibility test is needed." We will closely monitor how often susceptibility tests are ordered in these situations and adjust future policies accordingly. For significant pathogens, antibiotic susceptibilities will continue to be done immediately upon initial isolation of the microorganisms.

Karl T. Kleeman, Ph.D.

Microbiology Coverage on Evening Shift

Starting January 3, 1995, the Microbiology Department will begin staffing the evening shift on weekdays except for holidays. The purpose of this change is to enhance turnaround time, especially for physician office and other outpatient specimens. All reportable results are available in the computer as soon as they are finalized by the technologist.

*Karen Sanderson
Manager, Specialty Laboratories*

New Blood Culture Bottle Containing Escorb

As of mid-December, Rex will now be using a new blood culture bottle containing Escorb, an additive that inactivates antibiotics and other antimicrobial substances that may be found in blood. This new bottle allows for the enhanced isolation of microorganisms, in particular staphylococci and yeasts. All aerobic blood cultures will be set up using the new bottle. The anaerobic blood culture bottle will not change.

Karl T. Kleeman, Ph.D.

New Chemistry Reference Ranges

Effective December 11, 1995, reference ranges for the following Chemistry tests will be modified to reflect a change in instrumentation: CK-MB, CK-MB Index, Cortisol, FSH, LH, HCG intact, Prolactin, TSH, Free T4, Folate, Vitamin B12, Ferritin. The modified TSH has third generation sensitivity. See attached detailed listing. The new instrumentation will allow an expanded test menu and improve efficiency. CK series begun with the "old" CK-MB assay will be completed using this assay to assure consistency.

*John D. Benson, M.D.
Robert B. Brainard, Ph.D.*

For further information, call the Laboratory (783-3040). Telephone extensions are: Dr. Benson (3059), Dr. Brainard (3056), Dr. Carter (3058), Dr. Chiavetta (3040), Dr. Kanich (3057), Dr. Kleeman (3063), Dr. Nance (3286), Dr. Sorge (3062), Robin Ivosic (Core Lab Manager 3053), Linda Lompa (Blood Services Manager 781-0220), Lynn Nichols (Rex Outreach 783-4488), Rex Outreach Couriers (783-4400), Karen Sanderson (Specialty Labs Manager 3396), Greg Wilson (Customer Services Manager 3318).

NEW CHEMISTRY REFERENCE RANGES

Effective December 11, 1995, reference ranges for the following Chemistry tests will be modified to reflect a change in instrumentation. The new instrumentation will allow an expanded test menu and improve efficiency. CK series begun with the “old” CK-MB assay will be completed using this assay to assure consistency.

| | <u>NEW</u> | <u>OLD</u> |
|-------------------------------------|--------------|--------------|
| <u>Cardiac</u> | | |
| CK-MB (ng/mL) | 0.0 - 9.5 | 0.0 - 7.0 |
| CK-MB Index | < 4.1 | < 3.6 |
| <u>Endocrine</u> | | |
| Cortisol (ug/mL) | 8.7 - 22.4 | 8.0 - 24.0 |
| FSH (mIU/mL) | | |
| Male | 1.3 - 19.3 | 2.0 - 17.7 |
| Female | | |
| Follicular phase | 3.9 - 8.8 | 3.6 - 16.0 |
| Mid-cycle peak | 4.5 - 22.5 | 8.1 - 28.9 |
| Luteal phase | 1.8 - 5.1 | 1.8 - 11.7 |
| Postmenopausal | 16.7 - 113.6 | 22.9 - 167.0 |
| LH (mIU/mL) | | |
| Male | 1.2 - 8.6 | 0.9 - 10.6 |
| Female | | |
| Follicular phase | 2.1 - 10.9 | 1.1 - 11.1 |
| Mid-cycle peak | 19.2 - 103.0 | 17.5 - 72.9 |
| Luteal phase | 1.2 - 12.9 | 0.4 - 15.1 |
| HCG, intact (mIU/mL) | | |
| Male | 0.0 - 5.0 | 0.0 - 3.0 |
| Female, Gestational Age | | |
| 0 - 2 weeks | 5 - 500 | 0 - 500 |
| 2 - 3 weeks | 100 - 5,000 | 100 - 1,000 |
| 3 - 4 weeks | 500 - 10,000 | 500 - 6,000 |
| 4 - 12 weeks | 1,000 - 200K | 5,000 - 200K |
| > 12 weeks | 5,000 - 50K | 5,000 - 50K |
| Prolactin (ng/mL) | | |
| Male | 2.6 - 13.1 | 1.8 - 14.4 |
| Female | | |
| Premenopausal | 3.3 - 26.7 | 3.6 - 14.8 |
| Postmenopausal | 2.7 - 19.0 | 3.6 - 14.8 |
| TSH (uIU/mL) | 0.49 - 5.66 | 0.4 - 6.5 |
| Free T4 (ng/dL) | 0.9 - 1.6 | 0.7 - 2.0 |
| <u>Nutritional/Metabolic</u> | | |
| Folate (ng/mL) | 3.0 - 20.0 | 1.5 - 20.0 |
| Vitamin B12 (pg/mL) | 180 - 914 | 130 - 770 |
| Ferritin (ng/mL) | | |
| Adult Male | 24 - 336 | 30 - 300 |
| Adult Female | 11 - 307 | 10 - 200 |