UCDHS Reference Intervals

When:	Total CK (U/L)	and CK-MB (ug/L)	and RI* (no units)
Reference (Normal)	≤ 250	< 8.0	Not Calculated
	>250	≥ 8.0	< 3.2
Myocardial Damage	**≤ 250**	**≥ 8.0**	**Not Calculated**
	>250	**≥ 8.0**	**≥ 3.2**

$$\text{*Relative Index (RI)} = \frac{\text{CK-MB}}{\text{Total CK}} \times 100$$

Critical Value

When calling critical values, ALL RESULTS in the CK-MB panel must be provided to allow proper interpretation of the results. CK-MB alone is not adequate for the determination of myocardial infarction; increases in CK-MB may be due to non-cardiac sources. The CK-MB/total CK ratio or "relative index" is used to help determine the sources of the CK-MB.

Any first result where the CK-MB is ≥ 8 µg/L and the Total CK is ≤ 250 U/L is critical.
(No Relative Index is calculated in this case.)

Also, any first result where the CK-MB is ≥ 8 µg/L, the Total CK is > 250 U/L, and the Relative Index is ≥ 3.2 is critical.

Critical value documentation should be appended to the CK-MB result using the canned text **C**. Do not append critical value documentation to the Relative Index.

Another rise in CK-MB after 48 hours should be recalled as a critical value.

Procedural Notes

For assays employing antibodies, the possibility exists for interference by heterophile antibodies in the patient sample. Patients who have been regularly exposed to animals or have received immunotherapy or diagnostic procedures utilizing immunoglobulins or immunoglobulin fragments may produce antibodies, e.g. HAMA, that interfere with immunoassays. Additionally, other heterophile antibodies such as human anti-goat antibodies may be present in patient samples.(15,16)

Such interfering antibodies may cause erroneous results. Carefully evaluate the results of patients suspected of having these antibodies.

The Access CK-MB results should be interpreted in light of the total clinical presentation of the patient, including: symptoms, clinical history, data from additional tests and other appropriate information.

The Access CK-MB assay does not demonstrate any "hook" effect up to 20,000 ng/mL.

Performance Characteristics

Analytical Measurement Range

Samples can be accurately measured within the analytic range of the lower limit of detection and the highest calibrator value (approximately 0.1–300 µg/L).

Clinical Reportable Range:

If a sample contains less than the lower limit of detection for the assay, report the results as less than that value [**< 0.1 µg/L**].

If a sample contains more than the stated value of the highest Access CK-MB Calibrator (S5), report the result as greater than that value (**> 300 µg/L**). **Do not dilute**.