



RECOMMENDATIONS AS A RESULT OF THE ACB NATIONAL AUDIT ON TUMOUR MARKER SERVICE PROVISION

1. Laboratories should, wherever possible adopt local guidelines for non-specialists for the most appropriate use of tumour markers. These should be based on nationally or internationally developed evidence based guidelines.
2. Those requesting tumour markers should be aware that:
 - No single tumour marker in current use is specific for malignancy.
 - In general, serum tumour markers are rarely elevated in patients with early malignancy.
 - No tumour marker has absolute organ specificity.
 - Measurement of tumour markers are not recommended in patients with vague symptoms when the likelihood of cancer is low.
 - Requesting multiple tumour markers in an attempt to identify the primary cancer or the presence of secondaries is rarely of value.
 - Tumour markers should only be requested in situations where the results can influence clinical practice with a consequent favourable outcome for the patient and should only be used in areas where there is sufficient expertise to interpret the results.
3. The main use of serum tumour markers is in monitoring of diagnosed cancer patients.
4. Laboratories should regularly audit their tumour marker service in order to review the requesting patterns and use.
5. Wherever possible, laboratories should review their tumour marker requests, in particular those that are sent to another laboratory for assay. The only requests that should be performed from primary care are PSA in males, CA125 in females and where the GP is following up a patient being treated by a secondary care physician.

6. Where tumour markers are measured on fluids, the report should state that the method has not been validated if this is the case.

7. Laboratories should state:

- the relevant reference range of the tumour marker on the report and emphasise that these are not well defined and only to be used for guidance.
- that a value below or above the quoted reference range does not exclude a tumour or imply that a tumour is present.
- that benign conditions may cause rises, some transient, in serum tumour marker levels that may lead to incorrect interpretation.
- that factors such as lifestyle, medication and medical investigation and intervention can also influence the results.

8. Tumour marker results should always be interpreted in the context of all available clinical and laboratory information.

9. Laboratories should advise users of the service of factors that can affect the interpretation of tumour marker measurements e.g.: UTI and catheterisation prior to Serum PSA measurement and that samples are collected at the correct time after a particular procedure such as digital rectal examination.

10. When interpreting results, particularly serial results, clinicians need to be aware that results obtained using different methods are not necessarily comparable.

11. Laboratories should provide guidance on the appropriate frequency of tumour marker measurement e.g. by recommending minimum re-test intervals.

This statement is endorsed by the Association for Clinical Biochemistry and Laboratory Medicine but is not a statement of ACB policy.