Tumour Markers

Accreditation Status: UKAS Schedule of Accreditation

Date Scheme started: 1988

Clinical Applicability: Diagnosis and management of malignant disease

Analytes: Ovarian Markers (CA125) (SER/021)

Gut Markers (CA199) (SER/022) Breast Markers (CA153) (SER/023) Lung

Markers (NSE) (SER/024) Chromogranin A (SER/049)

All analytes are available separately

Units for Reporting: kU/L (CA series markers), μg/L (NSE), ng/mL and nmol/L (Chromogranin A)

Samples Distributed: Liquid format. Normal and pathological human serum

Number of Distributions per year: 6

Number of Samples per Distribution: 10 (2 x CA125, 2 x CA15-3, 2 x CA19-9, 2 x NSE, 2 x Chromogranin A)

Frequency of Distributions: Every two months as outlined in the Distribution Schedule

Schedule of Analysis: Data entry is via the web for the submission of results. Data analysis

is commenced 21 days after sample dispatch. Late returns are accepted and will

contribute to the laboratory's cumulative performance statistics

Data Analysis: All Laboratory Trimmed Mean (ALTM) with truncation at 2SD, SD, and CV%. Reports

also show method and manufacturer specific statistics. Individual laboratory performance is expressed in terms of MRBIS, SDBIS, and MRVIS. Because of marked differences in antigenic potency of some commercial kits, the Designated Value (DV)

for calculation of VI is the Method Laboratory Trimmed Mean (MLTM).

Chosen Coefficient of Variation:

CA125 and Ovarian markers 7%
CA15-3 and Breast markers 10%
CA19-9 and GI markers 10%
NSE and Lung markers 12.5%
Chromogranin A (pilot analyte) 30.0%

Performance Scoring: MRVIS

Criteria of Performance: Laboratory performance is classified in terms of the MRVIS over a running

analytical window of 6 Distributions (12 months)

 Ideal
 MRVIS
 <50</th>

 Good
 50 - 100

 Adequate
 101 - 200

Poor >200 or SDBIS >200

Persistent Poor Performance: Defined as being in the Poor Performance category for two or more

successive Distributions

Cancer Treatment Trials: Participation in these EQA programmes is often a requirement for

laboratories providing analytical services to clinicians wishing to enter patients. Such laboratories will be required to agree to the organiser releasing their

performance data to the relevant Trials Office