Alpha 1 Antitrypsin Phenotype Identification

Accreditation Status: UKAS Schedule of Accreditation

Date Scheme started: 2007

Clinical Applicability: The quantitation of AAT is indicated in the evaluation of chronic obstructive airway disease (COPD), emphysema and in neonatal and adult liver disease where low concentrations may have diagnostic importance

AAT genetic status (PI phenotyping) should be performed in all cases of deficiency when the quantitative assay gives results below the age related median concentration. The PI phenotyping should be determined in all children with liver disease irrespective of AAT concentration

Analytes: Alpha 1 Antitrypsin, PI Phenotyping **(SER/037)**
The sample analytes included will depend on their prevalence in the general population, therefore not all analytes may be covered during the year

Units for Reporting: g/L

Samples Distributed: Liquid format. Normal and pathological human serum

Number of Distributions per year: 4

Number of Samples per Distribution: 2

Frequency of Distributions: Every three 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 28 days after sample dispatch. Late returns are accepted and will contribute to the laboratory's cumulative performance statistics

Data Analysis: Phenotype Identification responses are assessed by MI scoring in relation to the designated response

Performance Scoring: MI scoring

Criteria of Performance: Laboratory performance is assessed over a running analytical window of 4 Distributions (12 months)

The categories of performance for Phenotype Identification are:

	Total MIS
Good	Zero
Adequate	1-3
Poor	>3

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