

# JOURNAL-BASED LEARNING EXERCISES



Each article's contents should be read, researched and understood, and you should then come to a decision on each question. The pass mark is 17 out of 20 questions answered correctly. JBL exercises may be completed at any time until the published deadline date. Please select your choice of correct answers and complete the exercises online at: [www.ibms.org/cpd/jbl](http://www.ibms.org/cpd/jbl)

## DEADLINE WEDNESDAY 5 APRIL 2018

<b>Standardization of steroid tests and implications for the endocrine community.</b> Honour JW. <i>Ann Clin Biochem</i> 2017; 54 (6): 628–30. <b>Serum cortisol: an up-to-date assessment of routine assay performance.</b> Hawley JM, Owen LJ, Lockhart SJ <i>et al.</i> <i>Clin Chem</i> 2016; 62 (9): 1220–9. Assessment No: 010318		<b>Managing complaints in the independent healthcare sector</b> Independent Healthcare Sector Complaints and Adjudication Service ( <a href="http://www.iscas.org.uk/cat_view/121-iscas/70-iscas-publications">www.iscas.org.uk/cat_view/121-iscas/70-iscas-publications</a> ). Assessment No: 010918	
01	The analytical method used makes no difference to the cut-off used for a synacthen test.	01	The Independent Healthcare Sector Complaints and Adjudication Service (ISCAS) wields regulatory powers in the independent healthcare arena.
02	Mass spectrometry methods do not suffer from any interferences.	02	This code does not apply to issues around the Mental Health Act.
03	Synacthen is a synthetic form of ACTH.	03	ISCAS seeks to work fairly and avoid bias.
04	Endocrine stimulation test protocols are well established and do not need revisiting.	04	There are seven ISCAS principles set out with regard to dealing with complaints.
05	For analysis of samples from males, the Beckman Access method displayed a positive bias.	05	ISCAS does not comment on the subject of apologies.
06	The Roche E170 generation 1 assay bias was concentration-dependent for male samples.	06	In general, ISCAS expects complaints to be raised within six months.
07	The Abbott Architect and Beckman Access methods had marked negative bias.	07	The guidance advocates the use of meetings between the complainant and the independent healthcare provider.
08	The reference method in this study was LC-MS/MS.	08	A "written" response to a complaint can be issued as an email.
09	Metypapone has similar effects on the bias of all the assays tested.	09	The code does not advocate organisations making any sort of financial gesture of good will.
10	Of all the assays, the Siemens Centaur shows the largest effect of prednisolone.	10	Complaints needing external, independent adjudication are excluded from this process if they raise new issues at this point.
11	Cortisol-binding globulin concentrations are likely to affect assay bias.	11	There is a specific format that independent adjudicators must use when writing to those who have raised the complaint.
12	Manufacturers often do not state their method for displacing cortisol from its binding globulin.	12	ISCAS does not undertake ongoing reviews of independent healthcare providers that continue to fail to meet the standards.
13	The metypapone bias is likely to be due to accumulation of cortisol precursors in the sample.	13	It is possible to complain about how ISCAS has managed complaints at the tertiary level.
14	The problem of method-dependent bias has only recently come to light.	14	Implementation of any improvements derived from a complaint does not have to be issued in writing.
15	There are no clinical issues when laboratories move from the Roche I to the Roche II cortisol assay.	15	At stage 2 of a complaint review, the healthcare provider must update patients every 20 days as a minimum with regard to an ongoing review.
16	Of all the assays, the LC-MS/MS performed the best against GC-MS.	16	Professional regulatory bodies are aware that professional, regulated staff must assist with investigations.
17	Short chromatography in LC-MS/MS may give rise to endogenous interferences.	17	Independent healthcare providers are expected to make complaints procedures fully accessible to all, regardless of whether or not English is their first language.
18	Endogenous steroids may interfere in the internal standard signal with LC-MS/MS assays.	18	ISCAS does not take any consideration of the use of mediation.
19	The GC-MS assay used in Hawley <i>et al.</i> showed between-assay precision of <2% for all pools.	19	ISCAS recommends an empathetic and reflective approach to managing complaints.
20	Immunoassay imprecision ranged from 1.6% to 7.5%.	20	The code does not apply to those wishing to make a complaint on behalf of another individual.

## REFLECTIVE LEARNING

01	What factors need to be considered when changing supplier, or when a supplier changes their method, for steroid analyses?	01	Should standards of healthcare be any different in the independent sector to those in the NHS or other state-provided healthcare? If so, why and how different?
02	Outline the advantages and disadvantages of using LC-MS/MS for routine steroid analysis in the clinical laboratory.	02	Should there be national regulation to cover standards of healthcare provision directly rather than by having a separate body? Are there pros and cons either way?