## **JOURNAL-BASED LEARNING EXERCISES**

CPD

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

Biomarkers of acute kidney injury: the pathway from discovery to clinical adoption. Kashani K, Cheungpasitporn W, Ronco C. <i>Clin Chem Lab Med</i> 2017; <b>55</b> (8): 1074–89. Assessment No: 010319		Drucker's Top Tips to Successful Leadership (www.managementmattersnetwork.com/strategic-leadership/columns/druckers-top tips-to-successful-leadership), AND	
			inagement by Objectives (www.toolshero.com/management/management-by- ectives-drucker). Assessment No: 010919
	There are no biomarkers that are completely specific for acute kidney injury (AKI).	01	Leadership involves a manipulative element.
	Kidney injury molecule 1 (KIM-1) has been approved by the US Food and Drug Administration as an AKI biomarker for pre-clinical drug development.	02	Successful leaders achieve via the help and support of others.
	[TIMP-2]x[IGFBP7] may be elevated in diabetic patients.	03	Having great deals in place for staff ensures support for your leadership.
	Neutrophil gelatinase-associated lipocalin (NGAL), KIM-1 and interleukin (IL)-18 are elevated in patients with chronic kidney disease (CKD) as well as those with AKI.	04	You must be in a senior position to become a leader.
	NGAL is only upregulated after ischaemic AKI.	05	Leadership helps people perform to their top potential.
	Serum creatinine is a delayed and insensitive biomarker of changes in kidney function.	06	Inspiring people's minds overcomes tough conditions and provides strong leadership wins.
	KIM-1 may be suitable to distinguish patients with acute tubular necrosis.	07	Leadership is the same, no matter what field of work.
	IL-18 is a mediator of AKI.	08	Leadership is absolutely combined with management.
	Liver-type fatty acid-binding protein (L-FABP) can be used in conjunction with NGAL to improve the detection of AKI.	09	Deciding to become a leader is a crucial, significant step towards leadership.
	Urine and plasma levels of microRNA miR-21 can predict AKI progression.	10	Leadership can make the difference between success and failure in an operation.
	L-FABP expression occurs after increases in serum creatinine.	11	Management by objectives seeks to balance personal and organisational objectives.
	Timely identification of AKI can improve AKI outcomes.	12	There is no need to reward the achievement of objectives.
	[TIMP-2]x[IGFBP7] is a good biomarker in patients at low risk of AKI.	13	Objectives will be set for employees, not with them.
	A raised calprotectin will only be found in patients with AKI.	14	Drucker favoured the use of SMART goals.
	"Acute kidney stress" is synonymous with AKI.	15	Without clear performance indicators, staff cannot be managed well against objectives.
	NGAL can be detected as early as one hour after tubular injury.	16	Management by objectives is suitable for executives, directors and senior staff only.
	NGAL production is age- and gender-related.	17	Coaching and pathways are necessary to support employees.
	Serum creatinine can differentiate between structural and functional causes of AKI.	18	Management by objectives is intended to be motivational.
	NGAL is only expressed in the kidney.	19	Objectives must be clearly quantitative only.
	NGAL is an early marker of structural renal tubular damage.	20	There must be an identified organisational vision and aims to base management by objectives on.
	REFLECTIVE	LEAR	NING
	Outline the current strategy for detecting AKI in your hospital.	01	Consider your own leadership impact and whether you agree with Peter Drucker's summation of the key points. If not, why not?
	Which (if any) of the biomarkers reviewed in this paper would you recommend that	02	Is management by objectives suitable for medical laboratory staff of all grade