University of Nebraska Medical Center
REGIONAL PATHOLOGY SERVICES

LAB ALERT

Date: February 28, 2020

Test Update: Method and Test Code Changes for Serum Protein Electrophoresis

Dear Regional Pathology Services Clients,

In order to automate testing for serum protein testing, on Monday March 16th we will switch methodologies for detection and quantification of serum monoclonal proteins (paraproteins) from standard gel electrophoresis to Capillary Zone Electrophoresis (CZE) **[Test Code: TPEP]**. For reporting and patient management, paraprotein concentrations will be recorded in a numeric field that will allow trending over time.

At the same time, the lab will switch from serum immunofixation electrophoresis [Old Test Code: IFE] to Immunotyping (Immunosubtraction typing) by CZE **[Test Code: ITS]** for both initial confirmation and characterization of serum monoclonal protein isotypes. In the case of a new diagnosis in a patient with a small, possible paraprotein identified on serum CZE screening, immunotyping may be required to confirm the presence of the paraprotein for quantification purposes.

For ease of ordering, a Gammopathy Serum Panel which contains TPEP, ITS, GAM, and KAPLAM, [Test Code: GPS] was created for Regional Pathology clients.

The CZE method change will involve only serum protein studies. Urine protein electrophoresis [Test Code: UTPEP] and paraprotein isotyping (Bence-Jones proteins), [Test Code: IFEU] will continue to be performed by standard gel electrophoresis and immunofixation.

Interface Build:

If you have any questions regarding this interface build please e -mail: rpsinterfacesupport@unmc.edu

OrderCode	OrderName	ResultCode	ResultName	ResultUnits	LOINC	CPT	
TPEP same order code and specimen requirements. New results added							
TPEP	PROTEIN/SERUM &ELECT	TPE	TOTAL PROTEIN/SERUM	g/dL	2885-2	84155, 84165	
TPEP	PROTEIN/SERUM &ELECT	ALM	ALBUMIN SPE	g/dL	2862-1		
TPEP	PROTEIN/SERUM &ELECT	ALF1	ALPHA 1 SPE	g/dL	2865-4		
TPEP	PROTEIN/SERUM &ELECT	ALF2	ALPHA 2 SPE	g/dL	2868-8		
TPEP	PROTEIN/SERUM &ELECT	BETA	BETA SPE	g/dL	2871-2		
TPEP	PROTEIN/SERUM &ELECT	GAMA	GAMMA SPE	g/dL	2874-6		
TPEP	PROTEIN/SERUM &ELECT	PARAP1	SERUM PARAPROTEIN 1	g/dL	33358-3		New result code*
TPEP	PROTEIN/SERUM &ELECT	PARAP2	SERUM PARAPROTEIN 1	g/dL	33358-3		New result code*
TPEP	PROTEIN/SERUM &ELECT	PARAP3	SERUM PARAPROTEIN 1	g/dL	33358-3		New result code*
TPEP	PROTEIN/SERUM &ELECT	INTR2	VISUAL INTERPRETAT		49296-7		

*NOTE: These results codes will not always be resulted. For those interfaced clients whose EMR's match result slot, these should be made not required.

UTPEP same order code and specimen requirements. Remove results UALM,UALF1, UALF2, UBETA, UGAMA, NOTEU. New results added.

OrderCode	OrderName	ResultCode	ResultName	ResultUnits	LOINC	CPT	
UTPEP	PROTEIN/URINE &ELECT	MIN12	COLLECTION TIME(MIN)	minutes	13362-9	84156, 84166	
UTPEP	PROTEIN/URINE &ELECT	VOL12	TOTAL VOLUME	mL	19153-6		
UTPEP	PROTEIN/URINE &ELECT	UP	PROTEIN/URINE	mg/24 hr	2889-4		
UTPEP	PROTEIN/URINE &ELECT	UPARA1	URINE PARAPROTEIN 1	mg/24 hr	42484-6		New result code*
UTPEP	PROTEIN/URINE &ELECT	UPARA2	URINE PARAPROTEIN 2	mg/24 hr	42484-6		New result code*
UTPEP	PROTEIN/URINE &ELECT	UPARA3	URINE PARAPROTEIN 3	mg/24 hr	42484-6		New result code*
UTPEP	PROTEIN/URINE &ELECT	INTR3	VISUAL INTERPRETAT		32210-7		
UTPEP	PROTEIN/URINE &ELECT	PATHX	CONFIRMED BY		50595-8		

*NOTE: These results codes will not always be resulted. For those interfaced clients whose EMR's match result slot, these should be made not required.

	Delete IFE Test Code. Add order code ITS for replacement of IFE.					
OrderCode	OrderName	ResultCode	ResultName	ResultUnits	LOINC	CPT
ITS	IMMUNOTYPING WITH INTERPRETATION, SERUM	ITSB	IMMUNOTYPING SERUM			86334

	New order code GPS which include the TPEP, ITS plus IgG, IgA, IgM, and Kappa Lambda Free Light Chains					
OrderCode	OrderName	ResultCode	ResultName	ResultUnits	LOINC	CPT
GPS	GAMMOPATHY PANEL SERUM	TPE	TOTAL PROTEIN/SERUM	g/dL	2885-2	84155, 84165, 82784 X3, 83520 X2
GPS	GAMMOPATHY PANEL SERUM	ALM	ALBUMIN SPE	g/dL	2862-1	
GPS	GAMMOPATHY PANEL SERUM	ALF1	ALPHA 1 SPE	g/dL	2865-4	
GPS	GAMMOPATHY PANEL SERUM	ALF2	ALPHA 2 SPE	g/dL	2868-8	
GPS	GAMMOPATHY PANEL SERUM	BETA	BETA SPE	g/dL	2871-2	
GPS	GAMMOPATHY PANEL SERUM	GAMA	GAMMA SPE	g/dL	2874-6	
GPS	GAMMOPATHY PANEL SERUM	PARAP1	SERUM PARAPROTEIN 1	g/dL	33358-3	

GPS	GAMMOPATHY PANEL SERUM	PARAP 2	SERUM PARAPROTEIN 1	g/dL	3335 8-3	
GPS	GAMMOPATHY PANEL SERUM	PARAP 3	SERUM PARAPROTEIN 1	g/dL	3335 8-3	
GPS	GAMMOPATHY PANEL SERUM	INTR2	VISUAL INTERPRETAT		4929 6-7	
GPS	GAMMOPATHY PANEL SERUM	ITSB	IMMUNOTYPING SERUM			
GPS	GAMMOPATHY PANEL SERUM	IGG	IGG QUANT ONLY/SERUM	mg/dL	2465-3	
GPS	GAMMOPATHY PANEL SERUM	IGA	IGA QUANT ONLY/SERUM	mg/dL	2458-8	
GPS	GAMMOPATHY PANEL SERUM	IGM	IGM QUANT ONLY/SERUM	mg/dL	2472-9	
GPS	GAMMOPATHY PANEL SERUM	KAPQNT	KAPPA QNT FREE LT CH	mg/L	3691 6-5	
GPS	GAMMOPATHY PANEL SERUM	LAMQNT	LAMBDA QNT FREE LT CH	mg/L	3394 4-0	
GPS	GAMMOPATHY PANEL SERUM	KLRATO	K:L FREE LT CH RATIO		4837 8-4	

If you have any questions or issues with these changes please contact client services at 402-559-6420 and ask to speak with one of the client coordinators.