

May 15, 2024

DIAGNOSTIC SERVICES

Endocrine Testing and Specialized Endocrinology Requisition Update

Date effective: May 27, 2024

Background Information: Effective May 27 2024, updated versions of R250-10-77 Specialized Endocrinology requisition will be implemented provincially to capture updates to endocrine tests. Use of the Specialized Endocrinology requisition is restricted to endocrinologists and few pre-approved physicians with other specialties as per SOP F10-50-45D. All other ordering providers should be using updated General Endocrinology Requisition (R250-10-76).

Summary of changes:

- Some test codes have been updated in the revised requisitions to reflect test repatriation and/or change in assay methodology.
- A new section for physicians to provide **fasting instruction** for patients has been added. Laboratory procedure for collection and reporting has not changed.
- Common **Biochemistry/Hematology** tests have been added to the requisition.
- 25-hydroxy vitamin D ordering is now available on endocrinology requisitions. Indications for ordering and signature are not required on this requisition.
- **Oral Glucose Tolerance Test** (OGTT 75g), C-telopeptide, Bone ALP and macroprolactin have been added to the requisition. Aldosterone Renin Ratio (ARR) is now an orderable test that will report aldosterone, renin mass and their ratio.
- Additional section for **Miscellaneous** tests was added including ordering for special investigations. Clinical Biochemist should be consulted for specimen details.
- Cortisol orders post dexamethasone suppression tests can be ordered separately to allow laboratories to add comment "*post dexamethasone*".
- A summary table with updated reference intervals for new and revised assays is attached. The effective date is May 27, 2024.
- Less common tests can be ordered under "Other Tests" section of the appropriate requisition. Please print legibly and consult Lab Information Manual ([Lab Information Manual \(sbgh.mb.ca\)](http://sbgh.mb.ca)) for correct test names and requisitions.

References/Resources:

- See attached requisition with changes highlighted
- Please contact your site laboratory if you have any questions.

This requisition is restricted for use to pre-approved physicians only

Specialized Endocrinology Requisition

Use of this requisition is restricted to pre-approved physicians

Fields marked with * are mandatory and must be clearly legible or can result in specimen rejection.

Ordering Provider Information		Patient Information (print or use addressograph)	
*Last & Full First Name:	Billing Code:	*Last/First Name: (per Health Card)	
Inpatient Location:	*Critical Results Ph #:	*Date of Birth (dd/mm/yyyy)	*Sex: <input type="checkbox"/> Female <input type="checkbox"/> Male
*Facility Name/ Address:		*PHIN: Specify Province or DND if different	
Ph #:	Fax #:	MARN:	
Copy Report To (if info missing, report may not be sent):		Encounter #:	Patient Ph #:
Last & Full First Name:	Ph #:	Fax #:	Patient Address:
Facility Name/ Address:			
Last & Full First Name:	Ph #:	Fax #:	Demographics verified via:
Facility Name/ Address:			<input type="checkbox"/> Health Card <input type="checkbox"/> Armband <input type="checkbox"/> eChart/CR <input type="checkbox"/> Other

THIS SPACE FOR LAB USE ONLY
PLACE LIS LABEL HERE

Provide fasting instructions to patient

Patient Preparation Instructions (to be completed by ordering physician)

*Fast 8-12h Alternate time _____ h No (if not checked, assume non-fasting specimen)

Collection Information (fields marked with * required by person collecting sample)

*Collection: Venipuncture Capillary Indwelling Line

*Collector: _____ *Collection Date: _____

*Collection Facility/Lab: _____ *Collection Time: _____

Serum tubes _____ # Plasma tubes _____ Referring Lab: # of tubes sent _____ Samples shipped frozen

Fasting information No Yes # of hours _____

AM, PM or random cortisol order
Cortisol for DST

Biochemistry/Hematology	Calcium & Bone	Miscellaneous
<input type="checkbox"/> CBC (incl. differential) CBC	<input type="checkbox"/> Calcium CA	<input type="checkbox"/> Special Investigations MIS8
<input type="checkbox"/> Sodium NA	<input type="checkbox"/> Albumin AL	<input type="checkbox"/> Serum, no gel No. of tubes 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/>
<input type="checkbox"/> Potassium K	<input type="checkbox"/> Ionized calcium ICA	<input type="checkbox"/> SST 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/>
<input type="checkbox"/> Chloride CL	<input type="checkbox"/> PTH PTHY	<input type="checkbox"/> LHep 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/>
<input type="checkbox"/> Osmolality OS	<input type="checkbox"/> 25-hydroxy vitamin D VD25	<input type="checkbox"/> EDTA 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/>
<input type="checkbox"/> ALT ALTR	<input type="checkbox"/> Phosphate P	<input type="checkbox"/> Collect on ice: Yes <input type="checkbox"/> No <input type="checkbox"/>
<input type="checkbox"/> CK CK	<input type="checkbox"/> Magnesium MG	<input type="checkbox"/> 1,25-dihydroxy Vitamin D D125
<input type="checkbox"/> Creatinine & eGFR (if >18y outpatient) CR	<input type="checkbox"/> C-telopeptide/CTX (osteoporosis treatment) CTX	<input type="checkbox"/> Macroprolactin* MPLH
<input type="checkbox"/> eGFR (order separately for inpatient only) EGFR	<input type="checkbox"/> Bone Alkaline Phosphatase (bone turnover marker)* MIS8	Other tests:
<input type="checkbox"/> Urea U		
Thyroid	Adrenal	
<input type="checkbox"/> TSH with reflex TSH	<input type="checkbox"/> Cortisol AM (7-9 am) ^a COR	
<input type="checkbox"/> Free T4 FT4	<input type="checkbox"/> Cortisol PM (3-5 pm) ^b COR	
<input type="checkbox"/> Free T3 FT3	<input type="checkbox"/> Cortisol Random COR	
<input type="checkbox"/> Anti-TPO Ab (Thyroperoxidase Ab) TPO	<input type="checkbox"/> Cortisol for Dexamethasone Suppression Test (ask to add "post dexamethasone" comment)	
<input type="checkbox"/> TRAb (TSH Receptor Ab) TRAb	<input type="checkbox"/> Late night salivary cortisol No. of collection devices: 2 <input type="checkbox"/> 3 <input type="checkbox"/> SACO	
<input type="checkbox"/> Thyroglobulin (+ anti-Tg) THGL	<input type="checkbox"/> ACTH (collect/transport on ice, <60 min) ACTH	
Diabetes & Lipids	Reproductive, Fertility & Growth	
<input type="checkbox"/> Glucose (fasting, see ⁹ above) G	<input type="checkbox"/> FSH FSH	
<input type="checkbox"/> Glucose (random) G	<input type="checkbox"/> LH LH	
<input type="checkbox"/> HbA1C GYHB	<input type="checkbox"/> DHEA-S DHAS	
<input type="checkbox"/> OGTT 75g - Non-Pregnancy, fasting ⁹ GTT2	<input type="checkbox"/> Estradiol E2	
<input type="checkbox"/> Lipid panel (see ⁹ above) (chol, TG, HDL-c, LDL-c, non-HDL-c) LIPP	<input type="checkbox"/> Progesterone PGN	
<input type="checkbox"/> ApoB APB	<input type="checkbox"/> Prolactin (11 am - 5 pm preferred) ^F PL	
<input type="checkbox"/> Insulin INS	<input type="checkbox"/> 17-hydroxyprogesterone (I.C.MS/MS) OH17	
<input type="checkbox"/> C-peptide CP	<input type="checkbox"/> Testosterone, Total (7-10 am recommended) TST	
<input type="checkbox"/> Anti-GAD 65 antibody GADA	<input type="checkbox"/> Testosterone, Total, Bioavailable & Free (7-10 am, within 3 h of waking recommended) FTST	
<input type="checkbox"/> Anti-IA2 antibody	<input type="checkbox"/> Growth hormone GH	
<input type="checkbox"/> Anti-Insulin antibody INAA	<input type="checkbox"/> IGF-1 IGF1	
Hypertension	<input type="checkbox"/> hCG (quantitative) HCGQ	
<input type="checkbox"/> Aldosterone-Renin Ratio (ARR) ARR		
<input type="checkbox"/> Aldosterone ALDO		
<input type="checkbox"/> Renin RENI		

Requests for special testing (based on Clinical Biochemist consult)

25(OH) vitamin D ordering (Indications for ordering not required)

Free & Bioavailable Testosterone
Aldosterone Renin Ratio is an orderable test.

Test Name	Units	Reference Intervals				Comment
		Age	Gender	Low	Hi	
Aldosterone, plasma	pmol/L	0-<3y	M/F	83	3134	Upright: 61 - 978 pmol/L Supine: 32 - 654 pmol/L
		3 - <18y	M/F	144	677	
		>=18y	M/F	Comment		
Aldosterone, 24h urine	nmol/day	<14y	M/F	Comment		Reference intervals not established
		>=14y	M/F	3	78	
Renin Direct	mIU/L	0 -<3y	M/F	7.7	172	Upright: 4.4 - 46 mIU/L Supine: 2.8 - 40 mIU/L
		3 - <18y	M/F	9.4	93	
		>=18y	M/F	Comment		
Aldosterone-Renin Ratio (ARR)	pmol/mIU	<18y	M/F	Comment		Thresholds have not been established in pediatric population >90 pmol/L/μIU/mL strong positive 60-90 pmol/L/μIU/mL weak positive see 2020 Hypertension Canada Guidelines
		>=18y	M/F	<91		
Growth Hormone	μg/L	All	M/F	Comment		Basal levels are not diagnostic. Stimulation or suppression tests are required for diagnosis of growth hormone related disorders.
C-peptide	pmol/L	All	M/F	260	1390	Reference intervals are applicable to 12h fasting collection.
ACTH	pmol/L	All	M/F	1	13	Reference intervals are applicable to morning (7h00-10h00) collection.
IGF-1	μg/L	See Lab Information Manual for updated age and gender specific reference intervals.				