



# Eastern Health

## **MEMORANDUM**

**TO:** All Clinical Staff in Newfoundland and Labrador

**FROM:** Mass Spectrometry Laboratory

**RE:** New immunosuppressants testing – June 17, 2019

**DATE: JUNE 12, 2019**

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This Mass Spectrometry Laboratory memorandum is to notify all Newfoundland and Labrador Clinical Staff of the new sirolimus and everolimus immunosuppressants testing on-site. In addition, trough versus peak sampling differentiation will be made for cyclosporine. Tacrolimus, sirolimus and everolimus will all be orderable as trough samples only. The testing will normally be performed 3 times per week. STAT requests require approval by the clinical biochemist on-call.

**Five orderable tests will now be available:**

Test Name	Aliases	Provincial Mnemonic
Cyclosporine peak, whole blood	CSA/Gengraf/Neoral/Sandimmune peak, WB	CYCPE
Cyclosporine trough, whole blood	CSA/Gengraf/Neoral/Sandimmune trough, WB	CYCTR
Tacrolimus trough, whole blood	FK-506/Prograf trough, WB	TACTR
Sirolimus trough, whole blood	Rapamycin trough, WB	SIRTR
Everolimus trough, whole blood	Afinitor trough, WB	EVETR

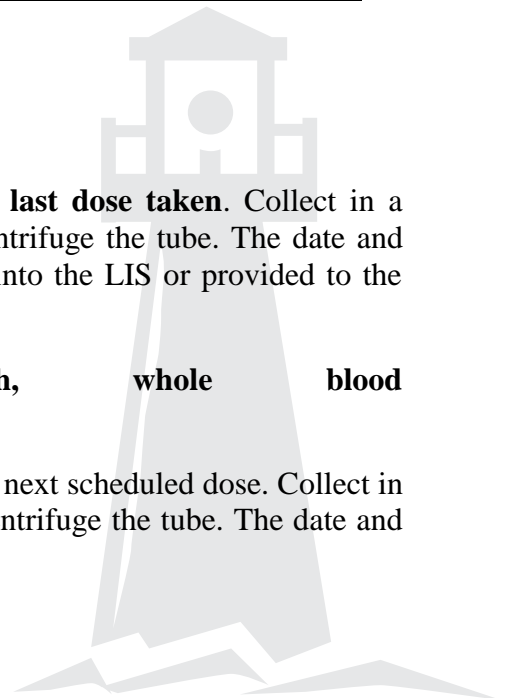
Collection instructions:

**Cyclosporine peak, whole blood (CYCPE):**

Collect whole blood peak level sample **precisely 2h after the last dose taken**. Collect in a lavender top (EDTA) tube. Mix the whole blood but **do not** centrifuge the tube. The date and time of collection and of the last dose taken should be entered into the LIS or provided to the data entry operator.

**Cyclosporine/Tacrolimus/Sirolimus/Everolimus trough, whole blood (CYCTR/TACTR/SIRTR/EVETR):**

Collect whole blood trough level sample **immediately before** the next scheduled dose. Collect in a lavender top (EDTA) tube. Mix the whole blood but **do not** centrifuge the tube. The date and



time of collection and of the next scheduled dose should be entered into the LIS or provided to the data entry operator.

*New therapeutic ranges and critical values:*

<b>Test Name</b>	<b>Therapeutic Range (µg/L)</b>	<b>Critical Value (µg/L)</b>
Cyclosporine peak, whole blood	600-1700 <sup>a</sup>	>2000
Cyclosporine trough, whole blood	100-400 <sup>a</sup>	>1000
Tacrolimus trough, whole blood	5.0-15.0 <sup>a</sup>	>25.0
Sirolimus trough, whole blood	5.0-15.0 <sup>a</sup>	>25.0
Everolimus trough, whole blood	3.0-8.0 <sup>a</sup>	>15.0

<sup>a</sup> Therapeutic range might vary from specific clinical protocols. The result should be interpreted by consulting the specific clinical protocol and the appropriate transplant center in conjunction with clinical information.

If you have any questions please reach out to Dr. Pierre-Luc Mallet, clinical biochemist, at 709-777-6376 or [PierreLuc.Mallet@easternhealth.ca](mailto:PierreLuc.Mallet@easternhealth.ca).