



To: UPHS Physicians and Staff

From: **Leslie M Shaw, PhD**
Michael C Milone, MD, PhD
JoAnn Gardiner, BS, MS

Date: January 4, 2022

Re: **Updated Target Drug Therapy Monitoring Ranges for Tacrolimus and Cyclosporine**

Effective December 15, 2021 updated target drug therapy monitoring trough blood concentration ranges for Tacrolimus and for Cyclosporine will be provided in the interpretative data in the reports for these immunosuppressant drug tests.

The target ranges and corresponding post-transplant time periods for **Tacrolimus** and for **Cyclosporine**, summarized in the table below for solid organ transplant and bone marrow transplant patients, were updated in collaboration with our Transplant Pharmacy and Clinical teams. No changes were recommended for Lung or Bone Marrow transplant patient monitoring but are included in the table as well.

The standard of practice for Trough blood sample timing for Tacrolimus and for Cyclosporine remains the same: blood collection within one hour prior to the morning dose.

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Target trough blood concentration and corresponding post-transplant time ranges for solid organ and bone marrow transplant patients.				
TACROLIMUS			CYCLOSPORINE	
<i>Kidney</i>			<i>Kidney and Pancreas</i>	
8-12 µg/L	0-3 months		125-250 µg/L	0-12 months
6-10 µg/L	4-12 months		80-125 µg/L	> 12 months
5-8 µg/L	> 12 months			
<i>Pancreas</i>				
8-12 µg/L	0-6 months			
6-10 µg/L	7-12 months			
5-8 µg/L	>12 months			
<i>Heart</i>			<i>Heart</i>	
10-12 µg/L	0-12 months		250-350 µg/L	0-12 months
8-10 µg/L	13-24 months		100-150 µg/L	> 12 months
5-8 µg/L	> 24 months			
<i>Liver</i>			<i>Liver</i>	
10-12 µg/L	0-3 months		150-350 µg/L	0-12 months
5-8 µg/L	3-6 months		100-150 µg/L	> 12 months
4-8 µg/L	6-12 months			
<i>Lung</i>			<i>Lung</i>	
8-12 µg/L	0-12 months		250-350 µg/L	0-12 months
6-8 µg/L	> 12 months		200-300 µg/L	>12 months
<i>Bone Marrow</i>			<i>Bone Marrow</i>	
5-15 µg/L			200-250 µg/L	