



# Pathology Core Protocol

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<b>Protocol Section:</b>	Clinical Chemistry: General Lab Procedure	<b>Policy No:</b> CC-PPC1-GLP-PANEL
<b>Protocol Subject:</b>	Service Panels and Sample Volume Requirements for each assay	<b>Effective Date:</b> Apr 28, 2016
		<b>Date Reviewed:</b> Sept 6, 2016
		<b>Date Revised:</b> Sept 13, 2016

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**Introduction:** Samples can be tested for an individual analyte or a set of analytes (panel) that are specific to the organ of interest. At TCP Pathology Core, the organ panels that are set up on our analyzer are the Kidney Panel, the Liver Panel and the Cardiovascular Panel. Each panel includes organ-specific analytes where changes could indicate disease-associated organ dysfunction. Laboratories requesting these panels can decide which panels would be most suitable for their research project.

Currently we have 18 assays set up on our AU480 chemistry analyzer, plus a LIH (lipemia, icterus and hemolysis) assay to assess the pre-analytical interference on the sample. Below is the list of analytes that are routinely run by our lab and the volume required for each assay. Each sample submitted requires a minimum of **extra 10ul of dead volume added** to the final volume in order for the analyzer to run the test properly. If samples are badly hemolyzed or are from animals that are obese and prone to have lipemia, it's recommended to have at **least 20ul or more** for dead volume in case clots are present in the sample.

**List of Organ Panel and Sample Volume Requirements:**

**Kidney panel:** Sodium, Potassium, Chloride, (20ul total for all 3) Blood Urea Nitrogen (5ul), Creatinine (11ul), Total protein (8ul), Albumin (5ul), Calcium (7ul), Phosphorus (6ul).

**Liver panel:** Total bilirubin (16ul), Aspartate Aminotransferase (8ul), Alanine Aminotransferase (8ul), Alkaline Phosphatase (5ul).

**Cardiovascular panel:** Total cholesterol (5ul), HDL cholesterol (5ul), LDL cholesterol (5ul) Triglycerides (5ul), glucose(5ul)

**Complete panel:** everything on all 3 panels.

\*We can substitute some analytes between panels if required.

**Issued by Lab Manager:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Approved by Facility Management:** \_\_\_\_\_ **Date:** \_\_\_\_\_