

Anatomical Location	Common Clinical Conditions	Uncommon Conditions	Test	Result	Units	Interpretation
Pancreatic Fluid	Type of Fluid (Mucinous vs Serous)		CEA	>192	ng/mL	Mucinous Cyst
			CA19-9	≤192 <37 ≥37	ng/mL U/mL U/mL	Serous Cyst Mucinous Cyst Pseudocyst & Serous Cyst
Pericardial	Transudate vs Exudate		Protein	>30 ≤30	g/L g/L	Exudate Transudate
			Serum/Plasma Total Protein			
			Protein fluid:serum ratio	≥0.5		Exudate
			LD	>300	U/L	Exudate
			Serum/Plasma LD			
		LD fluid:serum ratio	≥0.6		Exudate	
	Malignancy		Appearance	Turbid Blood-streaked cloudy		Likely Infectious or Malignancy Likely malignancy or Tuberculosis
			CEA	>5µg/L		Malignant Pericardial Effusion
	Chylopericardium		Triglyceride	>Plasma level	mmol/L	Chylopericardium
	Portal Hypertension		Albumin			
		Serum/Plasma Albumin				
		Serum-fluid Albumin difference	>11	g/L	Portal Hypertension	
Infectious/Tuberculosis		Appearance	Turbid Blood-streaked cloudy		Likely Infectious or Malignancy Likely malignancy or Tuberculosis	
Cardiac rupture/puncture		Appearance	Bloody		Cardiac rupture/puncture	
Uremic renal failure		Appearance	Clear or Straw colored		Uremic renal failure	
Peritoneal Fluid	Transudate vs Exudate		Protein	≥25	g/L	Exudate
			(Fluid Protein is superior to Albumin)	<25	g/L	Transudate
	Spontaneous bacterial peritonitis		Protein	<10	g/L	High risk of spontaneous bacterial peritonitis
				≥10	g/L	Low risk of spontaneous bacterial peritonitis
			Serum/Plasma LD			
			LD	> upper limit of serum reference interval		High risk of secondary bacterial peritonitis
	Ascites (Liver, Nephrotic, Cardiac, Chylous)		Glucose	< serum levels	mmol/L	High risk of spontaneous bacterial peritonitis
			Protein	<25	g/L	Nephrotic & liver Ascites
				≥25	g/L	Cardiac Ascites
			Triglyceride	>2.26	mmol/L	Likelihood of Chylous Ascites
			Fluid-Serum Triglyceride ratio	>1.0		Likelihood of Chylous Ascites
	Bile leakage		Serum-fluid Albumin difference	<11	g/L	Nephrotic Ascites
			Serum/Plasma Total Bilirubin			
		Bilirubin	≥serum level	mmo/L	Bile leakage	
Pancreatic Extravasation		Serum/Plasma Lipase				
		Lipase	≥serum level	U/L	Pancreatic Extravasation	
Urine Extravasation		Creatinine	144 - 884	µmol/L	Urine Extravasation	
		Serum/Plasma Creatinine				
		Fluid creatinine:serum ratio	>1.0		Urine Extravasation	
Pleural Fluid	Transudate vs Exudate		Protein	>30 ≤30	g/L g/L	Exudate Transudate
			Protein fluid:serum ratio	≥0.5		Exudate
			LD	2/3 of upper limit of serum reference interval		Exudate
			LD fluid:serum ratio	≥0.6		Exudate
			Cholesterol	>1.16	mmol/L	Exudate
			Cholesterol	>1.24	mmol/L	Exudate

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Pleural Fluid	Transudate vs Exudate		Glucose	<3.33	mmo/L	Exudate of certain etiologies
			Creatinine	177 - 884 >1.0	µmol/L	Pleural Effusion Pleural fluid creatinine: serum ratio
	Chylothorax		Cholesterol	>5.2	mmol/L	Pseudochylous
			Triglyceride	>1.2 0.56 - 1.2	mmol/L mmol/L	Chylous Indeterminate
	Pancreatitis origin of Pleural Fluid		Lipase	>10,000	u/L	Associated with Pancreatitis
Synovial Fluid	Normal vs Abnormal Accumulation		Glucose	<0.55	mmol/L	Normal
			Lactic Acid	<2.8	mmol/L	Normal
			Uric Acid	<0.45	mmol/L	Normal Males
				<0.39	mmol/L	Normal Females
			Cholesterol	<65% of Plasma Level	mmol/L	Normal
			Triglyceride	<40% of Plasma Level	mmol/L	Normal
		Protein	<30	g/L	Normal	
	Infectious Inflammatory Non-inflammatory hemorrhagic joint disorders Crystal Induced Bacterial Arthritis Inflammatory Activity		Glucose	1.11 - 5.55	mmol/L	Infectious
			Glucose	0 - 2.22	mmol/L	Inflammatory Joint disorder
				0.55 - 1.11	mmol/L	Non-inflammatory hemorrhagic joint disorders
		Glucose	0 - 4.44	mmol/L	Crystal Induced	
	Bacterial Arthritis	Lactic Acid	>9	mmol/L	Suggestive of Bacterial Arthritis	
	Inflammatory Activity	LD	>750	U/L	High Inflammatory Activity	
Peritoneal Dialysis Fluid	Efficiency of Peritoneal Dialysis. The test results are meant to be input into the PET equation/software in the clinic.		Sodium			No reference intervals established. Results are intended for input into the PET testing equations and are not to be used in isolation
			Glucose			No reference intervals established. Results are intended for input into the PET testing equations and are not to be used in isolation
			Phosphate			No reference intervals established. Results are intended for input into the PET testing equations and are not to be used in isolation
			Total Protein			No reference intervals established. Results are intended for input into the PET testing equations and are not to be used in isolation
			Urea			No reference intervals established. Results are intended for input into the PET testing equations and are not to be used in isolation
			Creatinine			No reference intervals established. Results are intended for input into the PET testing equations and are not to be used in isolation