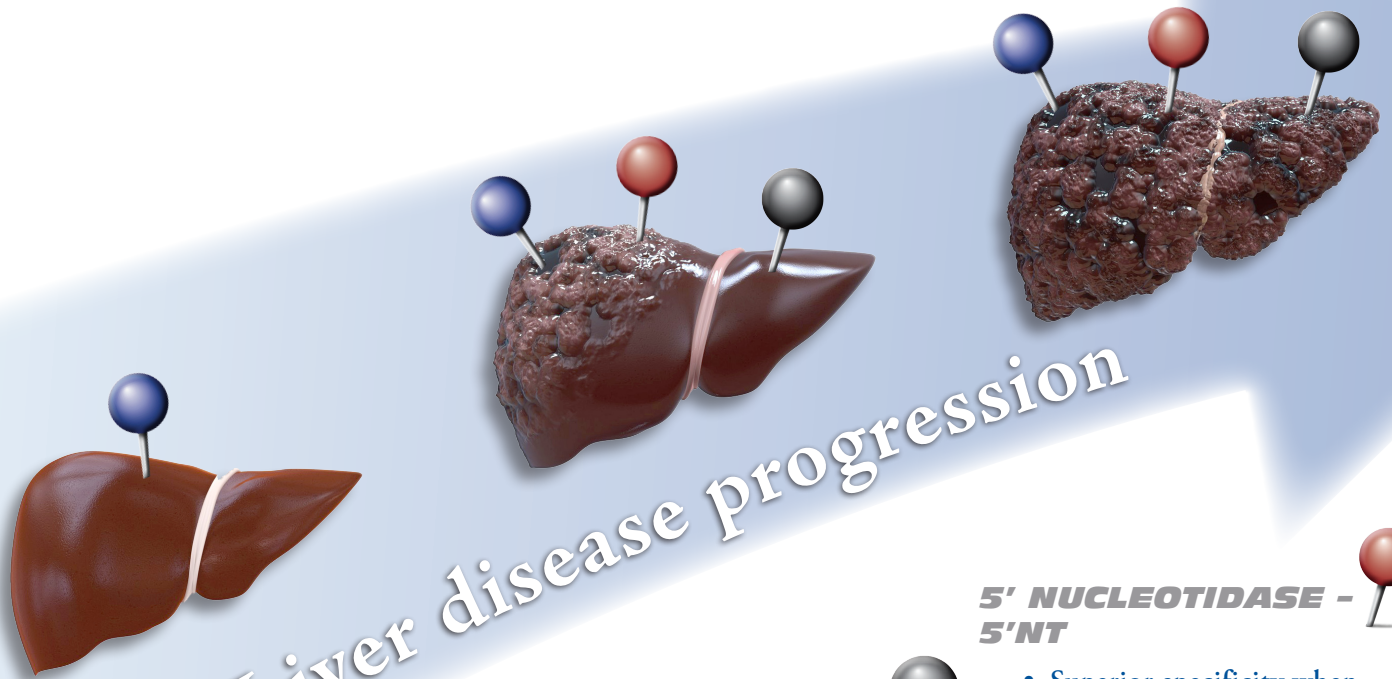


# HEPATIC BIOMARKERS

## LET'S GET SPECIFIC



Liver disease progression

### **TOTAL SERUM BILE ACIDS - TBA**

- A sensitive marker that can be used to analyze the early stages of impaired liver function
- Significantly reduced interference compared to NBT methods
- Two reagent liquid stable advanced enzyme cycling method

### **TOTAL AND DIRECT BILIRUBIN**

- Virtually no interference from hemolysis and lipemia
- Superior performing vanadate method
- Liquid stable two vial system

### **5' NUCLEOTIDASE - 5'NT**

- Superior specificity when compared to both Alkaline Phosphatase (ALP) and Gamma-glutamyl transferase (GGT)
- Liquid stable with improved on-board calibration stability when compared to (ALP) and (GGT)



## DIAZYME HEPATIC BIOMARKERS

	TBA	5'NT	Direct Bilirubin	Total Bilirubin
<b>Method</b>	Enzyme Cycling	Enzyme Cascade to Trinder Reaction	Vanadate Oxidation Bilirubin concentration in the sample can be obtained by measuring the absorbances at 450 nm before and after vanadate oxidation	
<b>Traceability</b>	UV spectrophotometric assay to predicate device	k-factor based on the enzymatic hydrolysis of 5'-monophosphate to H <sub>2</sub> O <sub>2</sub> via an enzyme cascade	NIST Bilirubin (SRM916a)	NIST Bilirubin (SRM916a)
<b>Method Correlation to Predicate</b>	Fifty-two (52) serum samples ranging from 0.47 – 131.25 µmol/L gave a correlation coefficient of 0.9918. Linear regression analysis gave the following equation: This method = 1.1536 (reference method) – 0.8567 µmol/L	There is no high sensitivity competitor method	R <sup>2</sup> = 0.9989 y = 0.905x + 0.045	R <sup>2</sup> = 0.9993 y = 0.959x + 0.140
<b>Precision</b>	Intra-Assay Precision < 4 CV% Inter-Assay Precision < 3 CV%	Intra-Assay Precision < 2 CV% Inter-Assay Precision < 4 CV%	Within-Run Precision < 3 CV% Within-Laboratory Precision < 4 CV%	Within-Run Precision < 8 CV% Within-Laboratory Precision < 2 CV%
<b>On-Board Stability*</b>	Four Weeks	Four Weeks	Four Weeks	Four Weeks
<b>Calibration Interval*</b>	One Week	One Week	One Week	One Week
<b>Calibrator</b>	Liquid vial	Lyophilized vial	Lyophilized vial Same calibrator for both assays	
<b>Sample Type</b>	Serum, Lithium Heparin Plasma	Serum, Plasma	Serum	Serum
<b>Sample Volume</b>	4 µL	10 µL	10 µL	10 µL
<b>Assay Range</b>	0 to 180 µM	0 to 300 U/L	0.1 to 20 mg/dL	0.1 to 40 mg/dL
<b>Instrument Specific Packaging</b>	<ul style="list-style-type: none"> <li>• Beckman</li> <li>- Synchron</li> <li>- AU Series</li> <li>• Roche</li> <li>- Hitachi</li> </ul>	<b>Universal Packaging</b>	<b>Universal Packaging</b>	<b>Universal Packaging</b>
<b>Regulatory Status</b>	<ul style="list-style-type: none"> <li>• 510 (k) Cleared</li> <li>• CE</li> <li>• Health Canada</li> </ul>	<ul style="list-style-type: none"> <li>• 510 (k) Cleared</li> <li>• CE</li> <li>• Health Canada</li> </ul>	<ul style="list-style-type: none"> <li>• 510 (k) Cleared</li> <li>• CE</li> </ul>	<ul style="list-style-type: none"> <li>• 510 (k) Cleared</li> <li>• CE</li> </ul>

\*Analyzer Dependent



### DIAZYME LABORATORIES

12889 Gregg Court, Poway, CA 92064

PO Box 85608, San Diego, CA 92186

Tel: 858-455-4768 888-DIAZYME

[www.diazyme.com](http://www.diazyme.com) [sales@diazyme.com](mailto:sales@diazyme.com)

### DIAZYME EUROPE GMBH

Zum Windkanal 21, 01109 Dresden, Deutschland

Tel. +49 (0) 351 886 3300 Fax +49 (0) 351 886 3366

[sales@diazyme.de](mailto:sales@diazyme.de)

