【Product Name】

Ammonia test Profile

【Packing Specification】

Type A:1 Test/Disc,10 Discs/Box

【Testing Instrument】

Celercare V or Pointcare V chemistry analyzer

【Intended Use】

The Ammonia Profile used with the Celercare V or the Pointcare V chemistry analyzer, is intended to be used for the in vitro quantitative determination of ammonia (NH_3) in heparinized whole blood or heparinized plasma in a clinical laboratory setting or point-of-care location.
The Ammonia Profile measurements are used in the diagnosis of hepatic encephalopathy, liver cancer, gastrointestinal bleeding.

【Principles of Testing】

The Ammonia Profile is used to quantitatively test the concentration of the ammonia in the sample, which is based on the spectrophotometry. The principles are as follows:

1. Ammonia

The ammonia in the serum converts NADH to NAD+ under the action of excess α-ketoglutaric acid, NADH and sufficient GLDH, and the rate of decrease in absorbance is proportional to the concentration of ammonia.

$$NH_4^+ + \alpha\text{-Oxoglutarate} + NADH \xrightarrow{GLDH} \text{L-Glutamate} + H_2O + NAD^+$$

【Principle of Operation】

Refer to the Celercare V or the Pointcare V chemistry analyzer Operator's Manual, for the Principles and Limitations of the Procedure.

【Description of Reagents】

Each Ammonia Profile contains lyophilized test-specific reagent beads.
Each test-specific reagent beads calibration parameters are including in the two-dimensional code on the label of sealing pouch.
The component of each Ammonia Profile is as follows (after redissolution):

Component	Quantity
Ammonia assay reagent	6.6 μL
Stabilizer	Appropriate amount

【Storage】

Store reagent discs in their sealed pouches at a temperature of 2-8°C (36-46°F). Do not expose opened

or unopened discs to direct sunlight or temperatures exceeding 32°C (90°F). Reagent discs may be used until the expiration date indicated on the package, which is also encoded in the unique code printed on the sealing pouch.

A torn or damaged pouch may allow moisture to reach the unused disc, adversely affecting its performance. Therefore, do not use any disc from a damaged pouch.

【Sample Requirements】

Sample collection techniques are described in the "Sample requirement" section of the Celercare V or the Pointcare V-chemistry analyzer Operator's Manual.

The required sample usage is 100 μL of lithium heparin whole blood, lithium heparin plasma or quality controls.

Whole blood samples collected by venipuncture must be homogeneous before transferring the sample to a reagent disc.

At the same time, it is necessary to carry out the test within 15 minutes. Before taking the test, shake the lithium heparin blood collection tube gently upside down several times.

Light may cause total bilirubin to decompose, causing deviations in the test results. Whole blood samples that are not tested immediately should be stored in a dark environment.

Use only lithium heparin evacuated specimen collection tubes for whole blood or plasma samples.

The test was started within 10 minutes after transferring the sample to the reagent disc.

【Interfering Substances】

Studies on known drugs or chemicals have found that when the interfering substances contained in the sample exceed the contents in the table below, the final test results are affected.?

Analyte	Interfering substances concentration （≤）			
	Bilirubin mg/dL	Intralipid mg/dL	Hemoglobin mg/dL	Vitamin C mg/dL
NH_3	40	1000	200	100

【Procedure】

■ Materials Provided

Ammonia Profile

Celercare V or Pointcare V chemistry analyzer

Transfer pipettes (fixed volume 100 μL for sample) and tips

■ Test Procedure

The complete sample collection and step-by-step operating procedures are detailed in the Operator's Manual for the Celercare V or Pointcare V chemistry analyzer.

■ Calibration

Each batch of reagent is calibrated using Randox standard serum to obtain the disc-specific calibration parameters before shipment.

The calibration parameters stored in the two-dimentional code printed on the sealed pouch are provided to analyzer at the time of scanning the code.

Refer to the Operator's Manual for specific information.

■ **Quality Control**

Refer to Operator's Manual of the Celercare V or the Pointcare V chemistry analyzer. Performance of the Celercare V or the Pointcare V chemistry analyzer can be verified by running controls. For a list of approved quality control materials with acceptance ranges, please consult the manual.
If control results are out of range, repeat one time. If still out of range, call MNCHIP customer service or local distributers for technical support. Do not report the results if controls are outside their labeled limits.

■ **Results**

The Celercare V or the Pointcare V chemistry analyzer automatically calculates and prints the analyte concentrations in the sample. Details regarding endpoint and rate reaction calculations can be found in the Celercare V or the Pointcare V chemistry analyzer Operator's Manual.

【Normal references Ranges】

These ranges are provided as a guideline only. It is recommended that your office or institution establish **references** ranges for your particular patient population.

Analyte	SI Units	Common Units
NH_3	Dog:0 ~ 99μmol/L Cat:0 ~ 99μmol/L	Dog:0 ~ 168.3μg/dL Cat: 0 ~ 168.3μg/dL

【Interpretation of Results】

Physiological interferents, such as hemolysis, icterus, and lipemia, can cause changes in the reported concentrations of certain analytes. Sample indices are printed at the bottom of each printout to inform the operator about any abnormalities in the sample. The operator should take care to avoid hemolysis caused by improper blood collection techniques.
The Celercare V or the Pointcare V chemistry analyzer suppresses any results that are affected by >10% interference from hemolysis, lipemia or icterus. "HEM", "LIP", or "ICT" respectively, is printed on the printout in place of the result.
Any result for a particular test that exceeds the assay range should be analyzed by another approved test method or sent to a referral laboratory. Do not dilute the sample and run it again on the Celercare V or the Pointcare V chemistry analyzer.

【Limitations of Procedure】

The Ammonia Profile should be used with the Celercare V or the Pointcare V chemistry analyzer, and is just used for in vitro diagnosis (IVD).
As with any diagnostic test procedure, all other test procedures including the clinical status of the patient, should be considered prior to final diagnosis.

【Performance Characteristics】

Accuracy

Analyte	The relative deviation or absolute deviation should meet the following requirements

NH_3	B% ≤ 10.0%

Batch precision

Analyte	Coefficient of variation (≤ *)
NH_3	5.0%

Inter batch precision

Analyte	Relative Range (≤ *)
NH_3	10.0%

Dynamic Ranges

Analyte	Dynamic Ranges
NH_3	10~600μmol/L

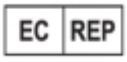
【Notes】

Used reagent discs contain animal body fluids. It is essential to follow good laboratory safety practices when handling and disposing of these used discs. For instructions on cleaning biohazardous spills, refer to the Celercare V or Pointcare V chemistry analyzer Operator's Manual.

The reagent discs are made of plastic and may crack or chip if dropped. Never use a disc that has been dropped, as it may spray biohazardous material throughout the interior of the analyzer.

Reagent beads may contain acids or caustic substances. Operators do not come into contact with the reagent beads when following the recommended procedures. It is important to avoid ingestion, skin contact, or inhalation of the reagent beads.

【Symbols Used in Labelling】

Symbol	Explanation
	Veterinary use only
	Manufacturer
	Unique device identifier
	Authorized representative in the European Community
	Use-by date
	Batch code

	Date of manufacture
	Consult instructions for use
	Limit of temperature
	Do not re-use

【Manufacturer】

Tianjin MNCHIP Technologies Co., Ltd.

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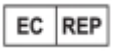
Service email: service@mnchip.com

Learn more about MNCHIP, other products can log in: http://www.mnchip.com



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