

M680

Chemistry and Immunoassay Integrated Solution

Technical Specifications

M680 General Information

Sample handling	180 samples by racks, sample continuous loading
STAT	40 positions for STAT, STAT in priority
Temperature	15~30°C
Humidity	35~85%
Altitude height	-400m~2000m
Dimension	≤2500mm*880mm*1230mm (W*D*H)
Weight	670kg



Chemistry Module

Throughput	600 photometric tests/hour, up to 800 tests/hour with ISE
Measuring principles	Absorbance Photometry, Turbidimetry
On-board tests	Up to 77 photometric tests + 3 ISEs+ 3 serum indices
Methodology	End-point, Fixed-time, Kinetic, ISE
Sample volume	1.5~45μL, step at 0.1μL
HbA1c sample	Whole blood for HbA1c test
Sample probe	Liquid level detection, clot detection and collision protection
Reagent tray	80 positions with cooling system (2~8°C)
Reagent volume	10~200μL, step at 0.5μL
Reagent probe	Liquid level detection, bubble detection and collision protection
Reaction volume	70~300L
Dimension	1380mm*860mm*1200mm (W*D*H)
Weight	350kg

Immunoassay Module

Throughput	Up to 240 tests/hour
Measuring principles	Micron superparamagnetic particles platform with alkaline phosphatase (ALP) labeled reagents and AMPPD substrate
Sample Probe	Steel probe, liquid level detection, clot detection, horizontal and vertical collision protection
Sample Volume	10~200μL, with increment of 1μL
Sample Dilution	Automatic dilution with 1:2~1:80
Reagent Disk	25 reagent positions, continuous loading, real-time mixing for magnetic particles (2~8°C)
Reagent Pack	50 tests, 100 tests
Reagent Probe	Steel probe, liquid level detection, bubble detection, clot detection, horizontal and vertical collision protection
Reagent Volume	10~200μL, with increment of 1μL
Dimension	1145mm*873mm*1225mm (W*D*H)
Weight	320kg

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Chemistry and Immunoassay Integrated Solution

Simple, yet Efficient



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healthcare within reach

M680

Chemistry and Immunoassay Integrated Solution



Flexible Sample Management

- 180 sample positions for chemistry and immunoassay
- 40 positions for STAT
- 1min aspiration
- Continuous sample loading by racks



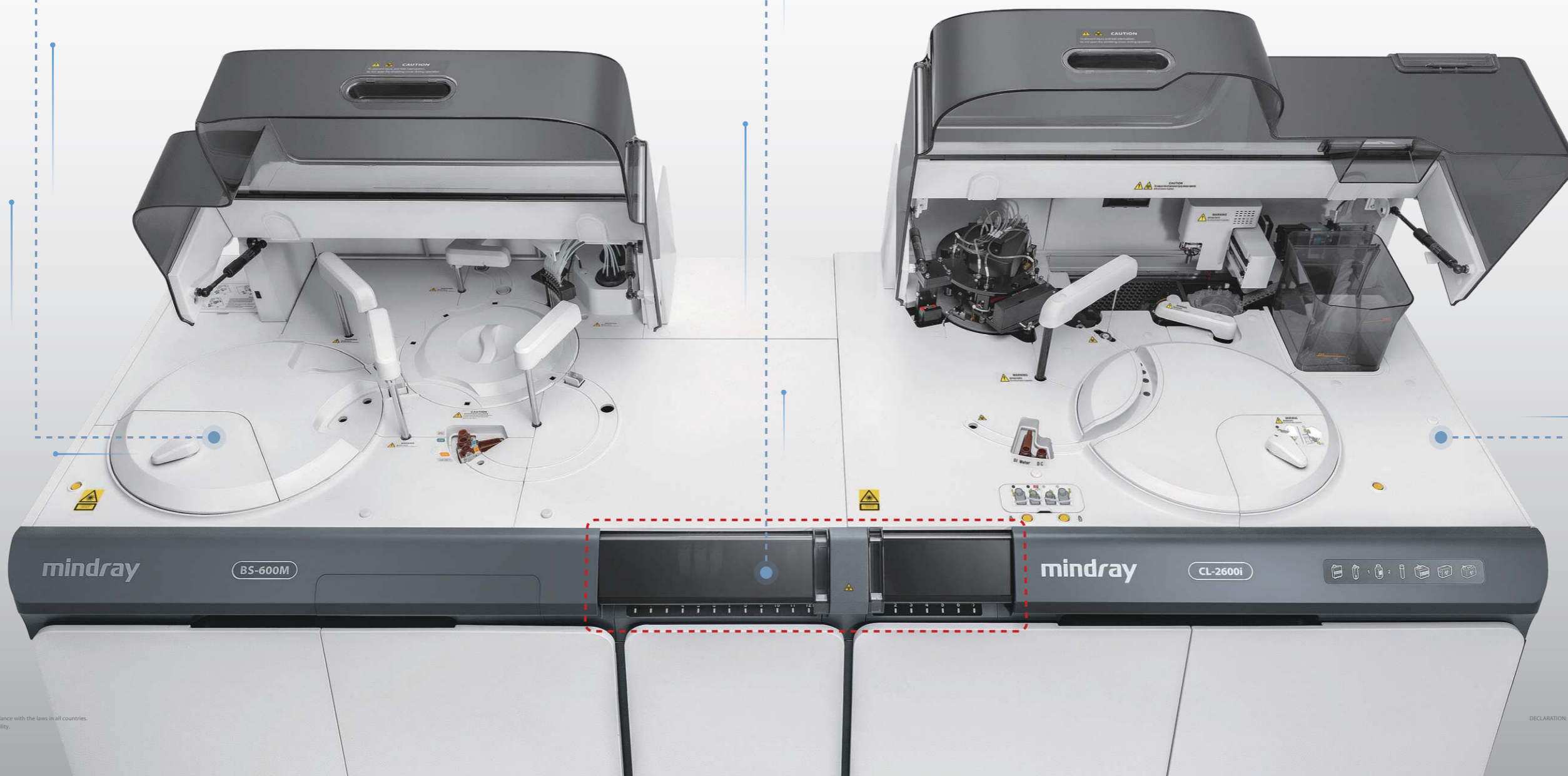
BS-600M Chemistry Module

- **600** T/H photometric
- up to **800** T/H with ISE



CL-2600i Immunoassay Module

- up to **240** T/H

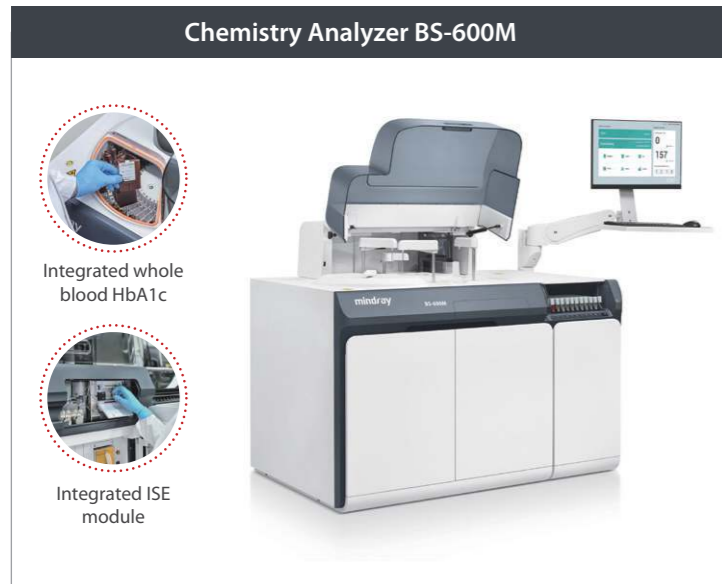


Reliable Test Result Based on Unique Design



High Quality Integration

- Takes up only 2.2 m² of space.
- Integrated with chemistry, immunoassay, ISE and whole-blood HbA1c.
- Flexible sample management with continuous sample loading by racks and STAT priority.

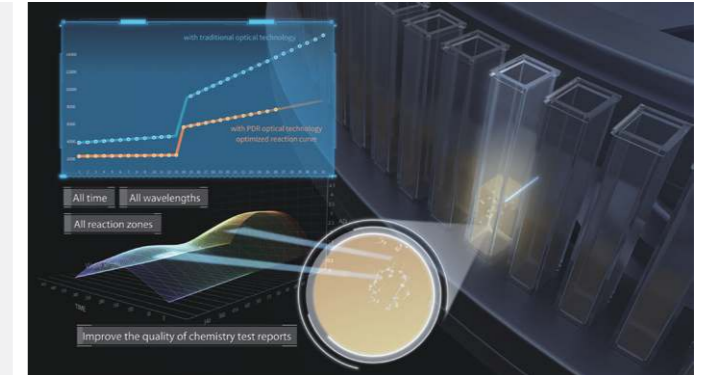


High Accuracy Level

- M680 features innovative techniques inherited from the most high-end integrated solutions of Mindray.

PDR Optical Platform

- PDR optical platform
- Panoramic dynamic real-time monitoring & signal traceback
- Eliminate interference and noise in the reaction process
- Stably improve the accuracy of results



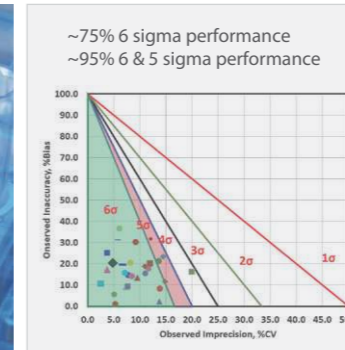
High Efficiency Operation

- Easy-to-use design allows users to optimize the work flow with fewer manual operation.



Whole-blood HbA1c

- Onboard hemolysis with whole blood to improve working efficiency.
- No manual pretreatment to reduce biohazardous risks and human errors.
- 120 T/H for HbA1c test to shorten turn-around-time.
- Results traced to IFCC/NGSP.

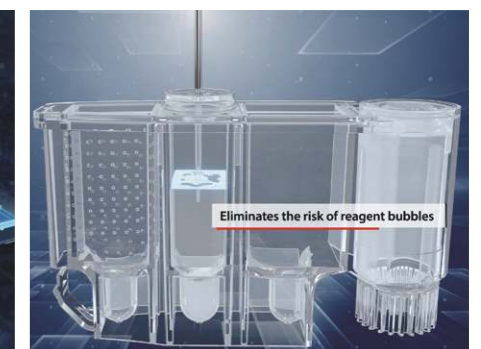


High Level Sigma Metric Performance

- Original reagents and validated application protocol lower the inaccuracy and imprecision which contributes to achieving world-class and excellent sigma metric performance.
- Higher sigma level system can help laboratories offer high level of quality at reduced cost and enhance clinician confidence and satisfaction.

FS-Sampling

- FS-Sampling can identify sample containers based on databases and algorithms, improving the accuracy of sample aspiration.



User-friendly Design

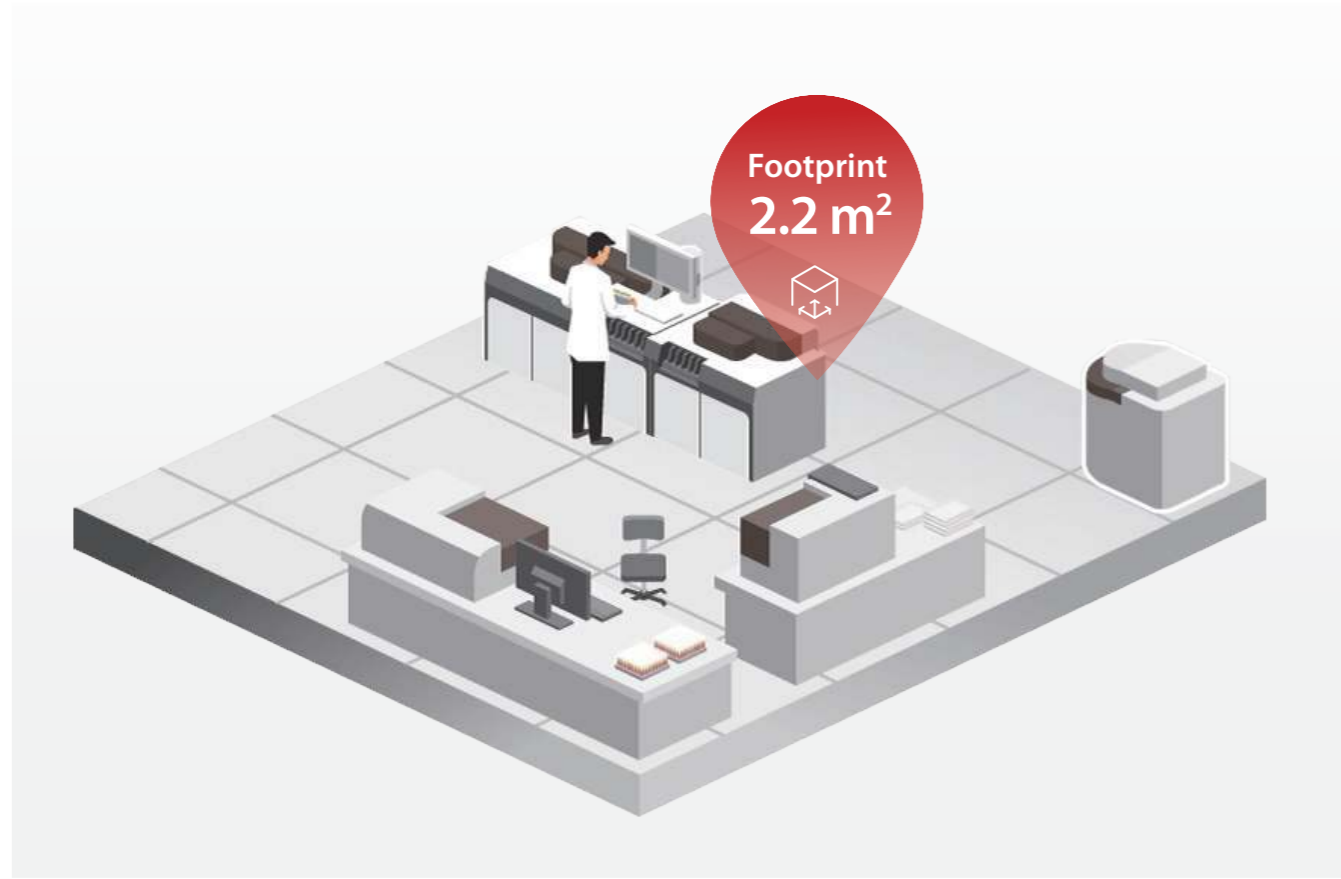
- Free of daily maintenance.
- Intelligent operation interface and breathing LED.



360° Waterfall Vacuum Washing

- 360° waterfall vacuum washing and enhanced washing eliminate carry-over <0.1 ppm.

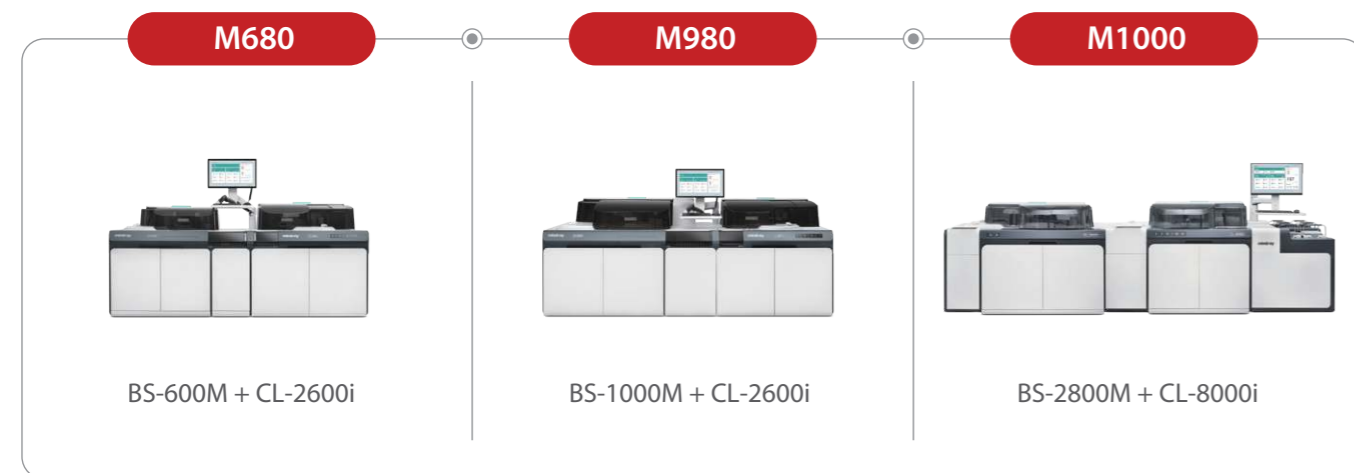
Seamless Connection, Flexible Combination



M-series Family

Mindray provides M-series integrated solution, covering the need of different customers.

M-series family is reliable and robust. Its key consumables have a longer service life, which can greatly reduce the frequency of maintenance and replacement, and reduce the service cost.



Assay Menu

Chemiluminescence					
Thyroid FT3 FT4 T3 T4 TSH Anti-Tg Anti-TPO Tg rT3 TRAB	Infectious Disease HIV Combo HBsAg Anti-HBs HBeAg Anti-HBe Anti-HBc Anti-HCV Anti-TP (Syphilis) HAV IgM* HEV IgG* HEV IgM* Anti-HAV*	Fertility Total β-HCG FSH LH Prolactin Estradiol Estriol TESTO PROG AMH Free TESTO* 17-OH PROG* SHBG*	Tumor marker CEA AFP CA125 CA15-3 CA19-9 Free PSA Total PSA NSE CYFRA 21-1 CA72-4 PG I PG II SCCA HE4 ProGRP CA50 CA242 PIVKA-II G-17 AFP-L3%* Hp IgG* S100*	Bone Metabolic Intact PTH Calcitonin Vitamin D total	Diabetes Insulin C-peptide
Liver Fibrosis Laminin Hyaluronic Acid PIIINP Collagen IV	COVID-19 SARS-COV-2 IgG SARS-COV-2 IgM SARS-COV-2 S-RBD IgG SARS-COV-2 Neutralizing Antibody	ToRCH Toxo IgG Toxo IgM Rubella IgG Rubella IgM CMV IgG CMV IgM HSV-1+2 IgG HSV-1+2 IgM HSV-1 IgG HSV-2 IgG Toxo IgG Avidity CMV IgG Avidity	Growth Hormone GH* IGF-1* IGFBP-3*	Inflammation Procalcitonin IL-6 sCD14-ST	DS DS' Screening PAPP-A* Free β-HCG*
				Anemia Ferritin Vitamin B12 Folate RBC Folate	EH Hypertension Renin Aldosterone
Clinical Chemistry					
Hepatic Panel ALT AST ALP γ-GT Bil-D DSA Bil-D VOX Bil-T DSA Bil-T VOX TP ALB TBA PA CHE AFU	Inorganic & Anemia Fe FER TRF Ca Mg P UIBC G6PD	Diabetes Panel Glu-O Glu-HK HbA1c FUN β-HB	Lipid Panel TC TG HDL-C LDL-C ApoA1 ApoB Lp(a)	Renal Panel UREA CREA-S UA CO ₂ mALB β ₂ -MG CysC RBP	Rheumatism Panel CRP RF ASO
				Pancreatitis Panel α-AMY LIP	Cardiac panel CK CK-MB LDH α-HBDH HS-CRP HCY MYO D-Dimer
					Immune Panel IgA IgG IgM IgE C3 C4
					Lung Panel ADA ACE

*: Under development

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