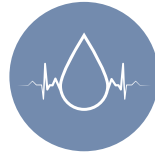




Fast Analysis



Small Sample
Volume



Excellent
Quality Control



Touch Screen
Operation



“Why wait for the test result?”
Get FRENDA!

FREND™ System

“Accelerating decision-making”

Accurate and fully automated FREND™ System offers fast results. With a simple 3 steps operation and wide range of disease markers, the system supports quick decision-making.

Benefit of the FREND™ System

“Easy & Fast Operation”

- ⌚ Diagnose with only 35 µL of sample volume
- ⌚ 3 simple steps to quick result: **Add sample -> Insert cartridge -> Get results**
- ⌚ Report test result in 3 min.
 - Patient will have test result before they leave doctor’s office
 - No retrieving test results from an outside lab



Scan it!



FREND™ System operating video

“User-Friendly Interface”

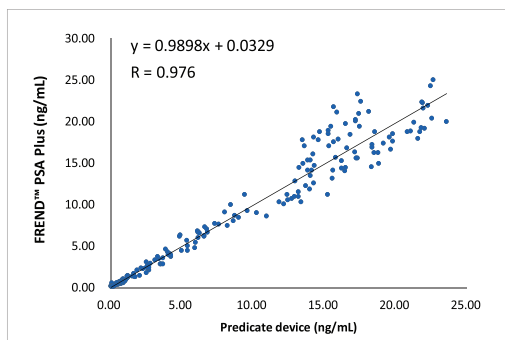
- ⌚ Offer intuitive & easily accessible GUI
- ⌚ Store up to 1,000 test results, and move the data easily to PC through USB
- ⌚ Print out test result with mobile printer



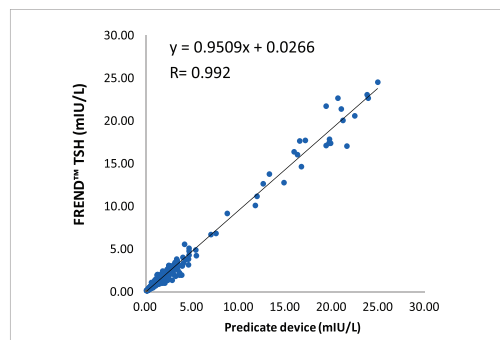
“Superior Accuracy”

- Demonstrate high correlation

Correlation value of FREND PSA is more than 0.97 compared to predicate device.

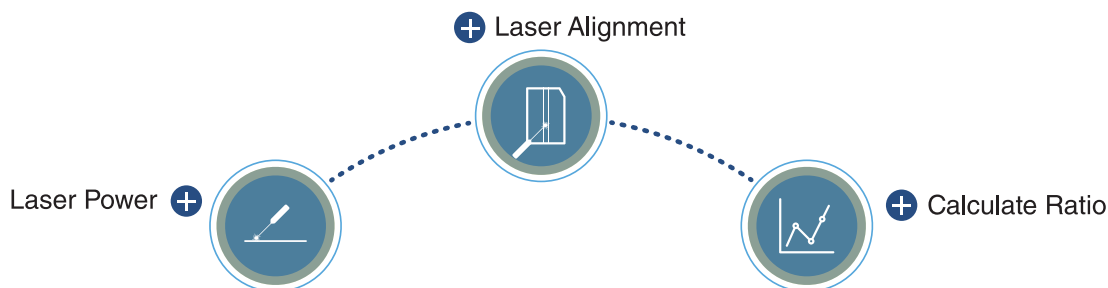


Correlation value of FREND TSH is more than 0.99 compared to predicate device.



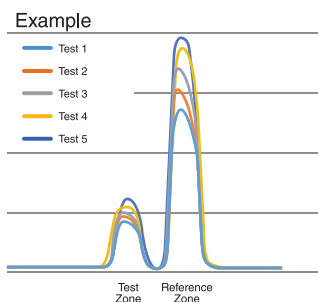
“Excellent quality control”

- Control FREND™ System quality in 1.5 min
 - No need to run liquid



- Correct test to test variation

- Reduce sharply CV comparing test zone data and reference zone data.



	Fluorescence Intensity		Ratio (Test/Reference)
	Test Zone	Reference Zone	
Test 1	32557	112542	0.289
Test 2	24603	84160	0.292
Test 3	26133	93322	0.280
Test 4	30427	104619	0.291
Test 5	21302	74288	0.287
AVERAGE	27004	93786	0.288
S.D.	4516	15348	0.005
CV%	16.7	16.4	1.7

(Source : NanoEnTek R&D)

- Check value assigned external control

- Bio-Rad Controls
- CLINIQA Controls

ex) PSA plus : Bio-Rad Liquichek™ Immunoassay Plus Control
 TSH : Bio-Rad Liquichek™ Immunoassay Plus Control

FREND™ System Application

“A wide range of cartridge for diagnostic testing”

Class	Test Item	Description	Sample type	Sample volume	AMR	Certification
Tumor	PSA Plus	Prostate cancer	Plasma or Serum	35 µL	0.05 ~ 25 ng/mL	CE, MFDS, FDA, CFDA
Hormone	Thyroid Duo (TSH/Free T4)	Thyroid function	Plasma or Serum	70 µL	0.06 ~ 25 mIU/L (TSH) 0.4 ~ 6 ng/dL (Free T4)	CE, MFDS, PMDA
	TSH	Thyroid function	Plasma or Serum	35 µL	0.06 ~ 25 mIU/L	CE, MFDS, FDA, PMDA
	Free T4	Thyroid function	Plasma or Serum	70 µL	0.4 ~ 6 ng/dL	CE, MFDS, FDA
	Total T3	Thyroid function	Plasma or Serum	70 µL	0.25 ~ 8 ng/mL	CE, MFDS
	Testosterone	Sexual disorder	Plasma or Serum	70 µL	0.2 ~ 15 ng/mL	CE, MFDS, FDA
Cardiac	Cardiac Triple (TnI, CK-MB, Myoglobin)	Myocardial infarction	EDTA - Plasma	35 µL	0.05 ~ 20 ng/mL (Troponin I) 1 ~ 80 ng/mL (CK-MB) 5 ~ 500 ng/mL (Myoglobin)	CE, MFDS
	Troponin I	Myocardial infarction	EDTA - Plasma	35 µL	0.05 ~ 20 ng/mL	CE, MFDS
	BNP	Heart failure	EDTA - Plasma	35 µL	30 ~ 2500 pg/mL	CE, MFDS, CFDA
Inflammation and Infection	PCT	Sepsis	Plasma or Serum	35 µL	0.07 ~ 32 ng/mL	CE, MFDS
Other	Vitamin D	Bone metabolism	Plasma or Serum	35 µL	10 ~ 110 ng/mL	CE, MFDS, FDA

FREND™ System Specification

Electrical rating	Voltage	100 - 240V ~
	Current	1.7 A
	Frequency	50 / 60Hz
Output	Voltage	DC 12V
	Current	3.33 A
Dimensions		240mm x 260mm x 175mm (W x L x H)
Weight		3 kg
Operating conditions	Temperature	10°C ~ 40°C
	Humidity	30% ~ 80%
Storage conditions	Temperature	15°C ~ 30°C
	Humidity	10% ~ 80%
User interface		7 inch touch screen
Mobile printer	Size	75mm x 103mm x 44.3mm
	Weight	200g
	Printing speed	50mm/sec

