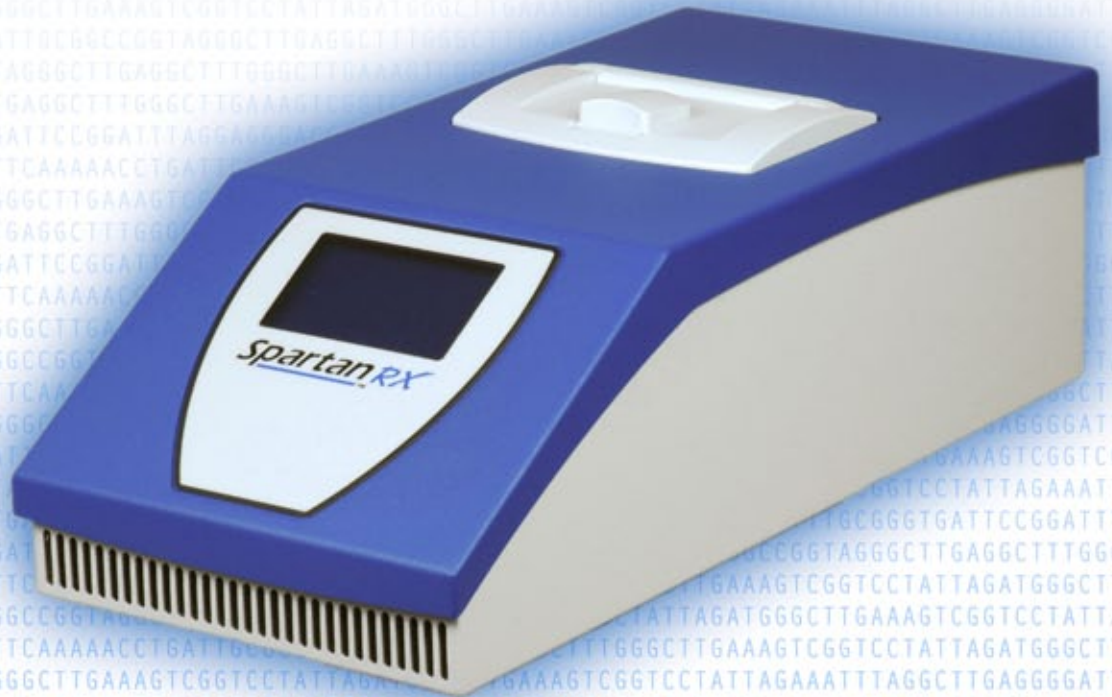


Spartan RXTM

Spartan RX CYP2C19 DNA Testing System Personalized Medicine for Heart Disease



↘ Point-of-care DNA Results

Introducing the Spartan RX: The first point-of-care sample-to-result DNA testing system



Clinical Need

- ↘ 2.2 million Percutaneous Coronary Interventions (PCI) are performed worldwide each year.
- ↘ Plavix® is the leading anti-platelet drug for PCI.
- ↘ In March 2010, the FDA issued a “black box” warning for Plavix® regarding CYP2C19 genetic carriers.
- ↘ About 30% of patients carry the CYP2C19*2 gene.¹
- ↘ CYP2C19*2 carriers receiving Plavix® have a 42% higher risk of Major Adverse Cardiac Events (MACE).²
- ↘ About 50% of MACE occur in the first 48 hours after PCI.³

Solution

- ↘ Point-of-care results in 1 hour.
- ↘ Sample-to-result system may be operated by a nurse.
- ↘ No laboratory training required.
- ↘ Patient-friendly. Non-invasive test using a buccal swab.
- ↘ Doctors may choose to prescribe alternative anti-platelet therapy to CYP2C19*2 carriers.

Sample to Result in 4 Easy Steps



1. Collect buccal sample.



2. Add sample to tube.



3. Insert tube into Spartan RX.

Press “Go”

4. DNA results in 1 hour.

Personalized Medicine

“As a one-hour point-of-care test, the Spartan RX CYP2C19 has the potential to significantly reduce major cardiac events in heart attack patients.”

Dr. Derek So, M.D.

Staff cardiologist, University of Ottawa Heart Institute



Pre-clinical Data

- Spartan RX CYP2C19 genotypes showed 100% concordance with DNA sequencing (n=107).
- Performance is equivalent to lab-based DNA tests (n=267).
 - >99% reliability
 - 100% sensitivity and specificity

Clinical Data

- In August 2010, the University of Ottawa Heart Institute launched a randomized controlled trial using the Spartan RX CYP2C19 DNA testing system (ClinicalTrials.gov: NCT01184300).
- Results will be available in Q2 2011.

Future Upgrades

- The Spartan RX CYP2C19 test currently identifies the *2 loss-of-function allele. This accounts for 95% of all carriers.²
- The test will be expanded to include additional SNPs in 2011.



Spartan[™]*RX*

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References

1. Damani SB, Topol EJ. (2010). *JACC*. 56:109-11.
2. Mega JL et al. (2009). *N Engl J Med*. 360:354-62.
3. Wiviott SD et al. (2007). *N Engl J Med*. 357:2001-2015.

Trademarks

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