Quality and service at every step

What separates good from great?
A reliable partner with a continued commitment
to quality and service at every step to keep
our operations performing.

Science For A Better Life

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Boost
your image

MEDRAD® Stellant
CT Injection System

Precise contrast delivery

Referrers rely on prompt, accurate diagnoses to guide therapy and enable improved patient outcomes. Precise contrast delivery is expected for consistency to allow optimal image quality.

Protocol management and precise contrast delivery
Enhanced efficiency

> Perform complex CTA and cardiac CT protocols

> Create a tight contrast bolus

> Enable precisely timed contrast delivery

> Individualize contrast dose with Certegra® P3T® 2.0

Dual syringe utilization benefits

DualFlow, simultaneous injection of contrast and saline in user-selected ratios can[1]:
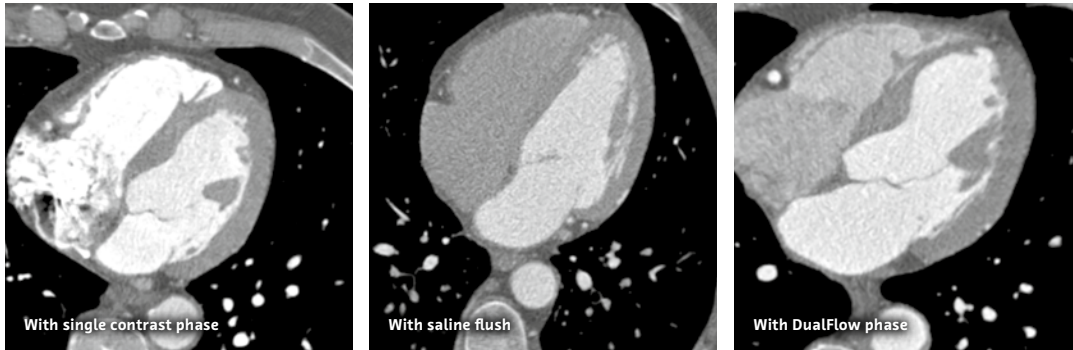
> Enable better visualization of the right heart due to reduction of streak artifacts

> Visualize the right coronary arteries and right ventricles in a single study by achieving more uniform attenuation

1 Kerl JM, Ravenel JG, Nguyen SA, et al. Right Heart: Split-Bolus Injection of Diluted Contrast Medium for Visualization at Coronary CT Angiography, Radiology. 2008;247:356-364.

DualFlow by comparison
Improve visualization

With single contrast phase   With saline flush   With DualFlow phase

Jensen, CT, "Dual Flow Contrast Injection for Coronary CTA Improves Visualization of the Right Heart," NASCI Abstract # 05-A-69-NASCI.

DualFlow can provide the ability to perform simultaneous injection of contrast and saline with user-selected ratios with the Medrad® Stellant Dual Injection System.

Certegra® P3T® 2.0
Individualize protocols

Powered by the Medrad® Stellant Injection System with Certegra® Workstation, Certegra® P3T® 2.0 calculates individually optimized patient protocols for cardiac CT, pulmonary angiography and abdomen studies.

Standardizing and easing implementation of personalized patient protocols offers important benefits, including:

› Facilitating implementation of multiple CT abdomen protocol strategies

› Reducing occurrences of suboptimal CT pulmonary angiography studies[2]

P3T® PA vs. Standard

P3T® PA weight: 300 pound; contrast: 116 cc; main PA HU: 274   **Standard** weight 295 pound; contrast: 80 cc; main PA HU: 171
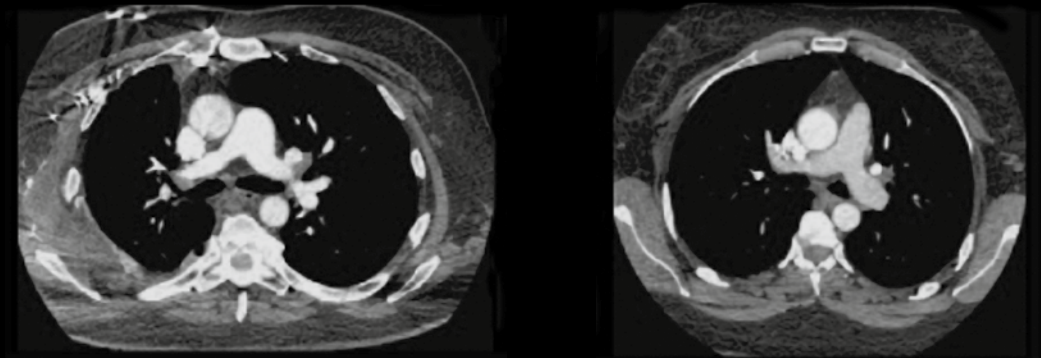
When compared to standard protocols, P3T® PA protocols result in a higher percentage of exams ranked diagnostic without limitation.*[3,4]

* Albeit at a slightly higher contrast dose than the standard protocol of 80 mL   2 A Clinical Evaluation of an Automated Software Program (Certegra® P3T® PA) for Patient Specific Contrast Injection During Chest CTA to Exclude Pulmonary Embolism; Christopher R Deible MD, PHD, Jacob Alexander MD, Iclal Ocak MD, Maryam Ghadimi Mahani MD, John Kalafut BS, MS, Janet E Durick MD, Carl R Fuhrman MD, Darlene Frasher RN, MSN, Karen M Pealer BA, CCRC, Michael P. Federle MD, Joan M Lacomis MD Department of Radiology, University of Pittsburgh Medical Center, Pittsburgh, PA, Medrad, Inc., Pittsburgh, PA RAD-INF-14-06087 May 2014   3 Presented at Society of Thoracic Radiology (2008) Poster Session; Christopher R. Deible MD, PhD.   4 510(k) FDA clearance number: K082905.

Enhanced protocol management that enables efficiency improvements

A simple workflow can help to save procedure time, avoid errors and additional scans. It allows for focusing on the patient.

Simple to use, automated injection system*
Streamline workflow

> Integrated saline test injection with real-time pressure monitoring

> Snap-on/twist-off syringe design

> Plungers automatically advance and retract when attaching and detaching syringes

> Automatic filling and priming

> Multiphase programming, including hold/pause feature

> Programmable pressure limit

Accurate post-study documentation*
Improve reporting accuracy

> Achieve workflow efficiencies

> Enables reduction of errors and information gaps[5]

New Multi-Patient Syringe System
Cost efficiency

> Perform multiple studies with a single syringe kit (for up to 12 hours)

> Recessed connections to avoid accidental contamination

> Multi-patient tube for reuse plus single-patient tube that needs to be replaced after each study

> Special check valves that prevent backflow from the patient
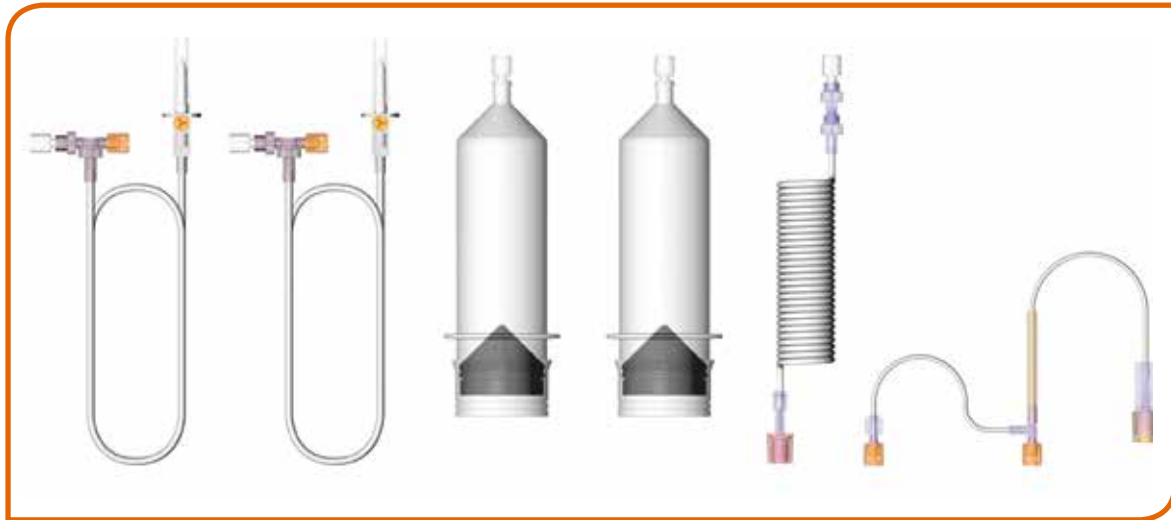
The Multi-Patient Syringe Kit for your Medrad® Stellant

Scalable options address your department's needs

Our customers look for solutions that can keep up with the changing demands of CT imaging at any time.

Scalable options
Boost your image

Take it to the next level

The Radimetrics™ Enterprise Platform seamlessly integrates with your hospital's IT infrastructure as well as your Bayer smart injection devices, providing the tools to help you achieve both your contrast and radiation dose management goals.

P3T® Software recommending personalized injection protocols

Personalized patient protocols allow technologists to individualize contrast dose protocols individually at the point of care with ease.

> **Abdomen studies**

> **Pulmonary angiography studies**

> **Cardiac studies**

Imaging System Interfaces (ISI) – scanner connectivity

The Certegra® ISI enables injectors and scanners to communicate, enhancing clinical capability by ensuring appropriate scan timing and simplifying workflow. **It enables scanner and injector synchronization.** Push one button to start both the scanner and the injector simultaneously. Because multi-slice scanners capture images so quickly, it is critical to have optimal contrast in the area of interest at the precise moment of the scan.

We offer four products:

> **Certegra® ISI 700**
> **(for Philips scanners)**

> **Certegra® ISI 800**
> **(for Siemens and Toshiba scanners)**

> **Certegra® ISI 900**
> **(for Siemens, Toshiba, Hitachi**
> **and General Electric scanners)**

> **Connect.CT sold as Philips SyncRight**
> **(for Philips scanners)**

Contrast Dose Management (CDM)

CDM automates documentation of contrast injection at the point of care and throughout the post-procedure workflow.

CDM provides tools to help drive efficiency, reproducible quality and personalized care:[6]

> **Auto-populate contrast injection records transferred to PACS, RIS and Speech Reporting (SR)**

> **Achieve workflow efficiencies**

> **Improve reporting accuracy**

> **Automate documentation**

> **Use data to inform improvement initiatives**

> **Accelerate report turnaround time**

> **Investigate and tie information to outcomes**

Injection Data Flow*

Injection Information

Patient and Study Information

Modality Work List Server

Additional Procedure Information

Modality

Transfer to PACS

Transfer to RIS

Transfer to Speech Recognition

Contrast Analytics Dashboards, Alerts

Radimetrics Enterprise Platform User Interface

Requires Medrad® Stellant CT Injection System with Certegra® Workstation.   6 South Jersey Radiology Associates. Customer Experience: Using Radimetrics™ Enterprise Platform Contrast Dose Management to Improve Billing Cycle Time and Enhance Reporting Efficiencies. Bayer Pharma AG, March 2015.

Dedicated experts for continuous uptime
Strengthen confidence

MEDRAD® Stellant with VirtualCare® Remote Support: delivers confidence with a connection to world-class monitoring, diagnosis and support:

VirtualCare Remote Support

Equipment Service

Benefits

> Software issues are often resolved remotely, in minutes rather than hours

> Hardware can be repaired in one trip, with the right parts, the first time

Security

If your injector is enhanced with a Certegra® Workstation:

> Proprietary software updates and patches arrive seamlessly

> Antivirus protection remains current*

> System alerts are monitored and resolved proactively

Support

> Problems are diagnosed remotely

> Solutions are developed quickly

> The recovery plan is completed quickly

*periodic updates provided per defined schedule

High quality and reliability
Maximize trust

Not all syringes are equal. Bayer delivers a high-quality and reliable injection solution that can save costs, equipment and downtime. When choosing contrast and saline syringes, you need to consider:

Particulates
Particulates from the manufacturing process can be directly injected into the patient if the syringe barrels are not thoroughly cleaned and inspected.

Biocompatibility
If syringes are made from non-biocompatible material, then harmful substances, e.g. BPA or DEHP, can leach into the saline or contrast agent and enter the bloodstream.

Application of silicone
If the application is not precisely controlled, then silicone can be over- or under-applied, impacting fluid-delivery performance and the well-being of your patients.

Compatibility
If a non-compatible syringe is used on a MEDRAD® injector, then its failure can result in over- or under-injection of contrast and may require rescanning and re-dosing the patient.

System Specifications
Mechanical Specifications

	Height	Width	Depth	Weight
Dual Injector Head	15.5 cm (6.1")	30.7 cm (12.1")	36.8 cm (14.5")	8.1 kg (17.9 lb) (without syringe)
Base Unit	29.2 cm (11.5")	27.9 cm (11.0")	22.2 cm (8.8")	6.2 kg (13.6 lb)
Certegra® Workstation (CWS)	34.2 cm (13.5")	40.0 cm (15.8")	30.0 cm (10.2")	8.0 kg (17.6 lb)

Ordering Information

Systems listed include all standard cabling

Catalogue Number: SCT 211
MEDRAD® Stellant D Injection System
with Pedestal Head Mount

Catalogue Number: SCT 212
MEDRAD® Stellant D Injection System
with Counterpoise System

Catalogue Number: SCT 321*
MEDRAD® Stellant D CT Injection System
with Certegra® Workstation with a Pedestal Head Mount

Catalogue Number: SCT 322*
MEDRAD® Stellant D CT Injection System
with Certegra® Workstation with Counterpoise System Head Mount

Injection Specifications

Flow Rate (range & increments):
0.1–10 mL/sec in 0.1 mL Increments

Volume (range & increments):
1 mL to Syringe Capacity in 1 mL Increments

Programmable Pressure Limit (psi/kPa):
200 mL Syringe: 325 psi, 2241 kPa

Scan Delay:
0–300 Seconds (5 minutes) in 1 Second Increments

Pause:
1–900 Seconds (15 minutes) in 1 Second Increments

Hold:
Maximum HOLD Time is 20 Minutes

Syringes (Volume capacity):
200 mL Sterile Disposable Syringe

Maximum Number of Phases:
6

Miscellaneous Specifications

Electrical Requirements (VAC/Hz):
100–240 VAC, 50/60 Hz, 300 Volts-AMPs

Syringe Heat Maintainer:
35 degrees C +/-5 degrees, 95 degrees F +/-9 degrees

Head Mounting Options: Overhead Counterpoise System or Floor Pedestal (Floor Pedestal includes an Integral IV Pole)

DualFlow: Simultaneous Injection of Contrast and Saline is integrated in the CWS and included

Certegra® P3T® 2.0 Cardiac Application: Cardiac CTA Protocol Optimization Software

Certegra® P3T® 2.0 Abdomen Application: Abdominal Protocol Optimization Software

Certegra® P3T® 2.0 PA Application: Pulmonary Angiography Protocol Optimization Software

Informatics Starter Package: Access to Modality Worklist and Database of Injections

PACS Outbound Interface: Send Secondary Capture of Contrast Injection to PACS

RIS Outbound Interface: Send Contrast Injection Information to RIS

Speech Recognition Outbound Interface: Send Contrast Injection Information to Speech Recognition System

Imaging System Interfacing (ISI): Several Types of Interfacing with the Scanner

VirtualCare®*: Remote service on the injector and software to ensure faster uptime

*available in some countries