



Reliability and Mobility Meet Simplicity: MEDRAD® Salient

Clear Direction.  From Diagnosis to Care.

MEDRAD® Salient
Contrast Injection System

Clear Direction: MEDRAD® Salient Dual

The MEDRAD® Salient Dual Contrast Injection System has been engineered to combine innovation and mobility in order to bring simplicity and reliability to your suite.



Simplicity

- Intuitive, icon-driven interface
- Flexible workflow and software architecture
- Single-action syringe loading
- Easy installation
- Battery operation for total mobility

Reliability

- Allows dependable, reproducible flow rates and pressures that can consistently deliver injection protocols
- Provides a maximum pressure up to 300 psi and up to 10 mL/s
- Enables accurate and repeatable contrast administration with power injection¹⁻³

Benefits of Saline Flush

Reduce image artifacts

Using a saline flush helps minimize the streak artifacts that often occur as the superior vena cava empties into the right heart.⁴

Improve and increase peak contrast enhancement

Using a saline flush pushes the contrast through the vascular system.⁴

Controlled timing of contrast bolus

Using a saline flush creates a tight contrast bolus that enables precise timing of contrast in the vascular system, which is essential for multi-slice CT scanning.⁴

Optimize contrast usage

Using a saline flush can prevent pooling of contrast in veins and the contrast connection line.⁴

Versatility in Your Suite

The straightforward design of Salient Dual offers flexibility for your daily operations.

- Cordless configuration:
Removes tripping hazards
- Compact design:
Enhances mobility
Enables easy transport and storage
- Various positioning options:
Accommodates a range of spaces
- Customized protocols:
Implement customized protocols – up to six phases
Saves up to 20 customized injection protocols

Additional Tools for Enhanced Efficiency

Salient Dual can also support the following accessories and features:

- Wireless control room monitor
- Available scanner interface: ISI 700
- Protocol Assistant Tool (PAT)



Salient Workstation with the Protocol Assistant Tool (PAT)

Bayer Is Your Partner

MEDRAD® injectors can support you in achieving diagnostic image quality for your patients and workflow efficiency in your procedures.



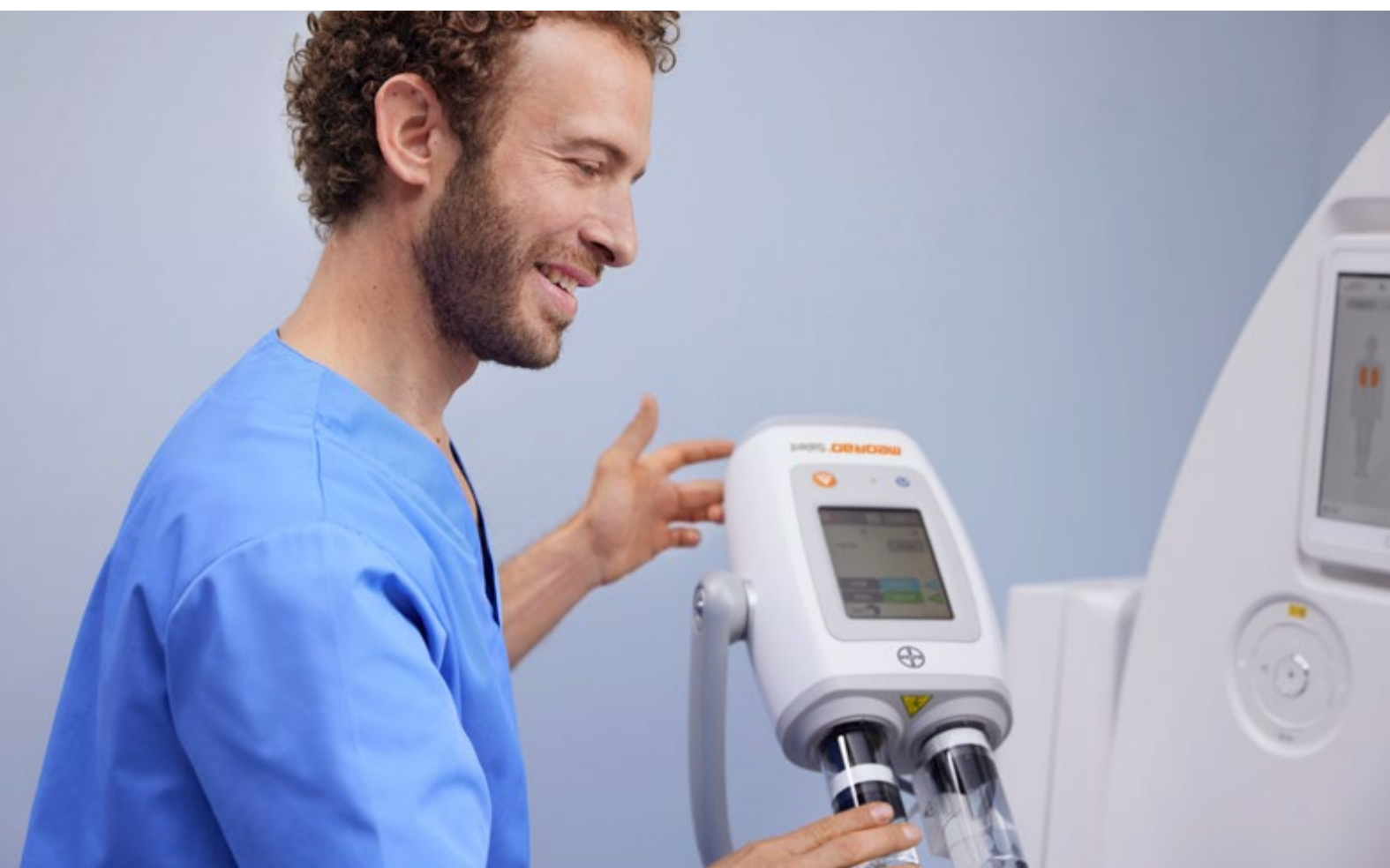
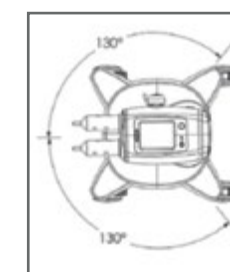
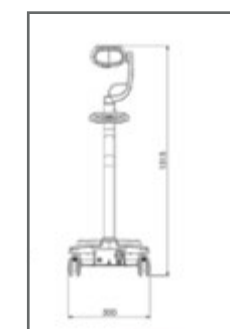
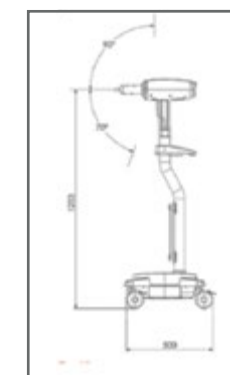
Example injection protocol of fictional patient as shown on Control Room Monitor Screen

- The Protocol Assistant Tool (PAT) assists you to deliver customized contrast media protocols to your patients for many common CT examinations.
- Ultravist® (iopromide) works seamlessly with the Salient PAT software.
- Our Service and Applications Specialists provide quality service and solutions to meet your clinical, financial, and operational needs.
- To learn more about MEDRAD® Salient Dual and other Bayer products, please speak to your local representative.

Main Features and Benefits



Dimensions



MEDRAD® Salient D Technical Specifications

Functional

Maximum pressure	300 psi
Flow rate	0.1 to 10 mL/s
Maximum volume	190 mL
Multi-phase protocols	Up to six phases. Storage for 20 different named protocols
Manual fill rate	Up to 10 mL/s
Auto fill rate	Up to 10 mL/s

Controls

Base	Line power, IEC inlet, on/off switch
Head	5.7" LCD touch screen, arm button, on/off soft switch
Infrared remote control	Inject start/stop

Mechanical

Weight	25.5 kg (Dual)
Height	1315 mm
Floor area	500 mm x 500 mm
No. of wheels	4 casters, all individually locking

Electrical

Line voltage	100 – 230 VAC
Line frequency	50/60 Hz
Battery operation	Dual batteries, sealed lead acid
Mains power operation	Simultaneous operation and battery charging
Contrast heat maintainer (one (1) included)	37°C +/- 4°C, 5W

Ordering Details

PART NAME	PART NO.
Salient Single Injector	DC009S
Salient Single Injector With Remote Control Unit	DC009SW
Salient Dual Injector	DC009D
Salient Dual Injector With Remote Control Unit	DC009DW
Scanner Interface Box for ISI 700 (optional)	ISI2
Connector Tubing for Dual (box of 50)	ZY5152
Connector Tubing Single (box of 50)	ZY5151
Syringe With Quick Fill Tube (box of 50)	ZY6322
Syringe With Fill Spike (box of 50)	ZY6323
Syringe With Fill Spike, Single LPCT (box of 50)	ZY6324
Syringe With Quick Fill Tube, Single LPCT (box of 50)	ZY6325
Heat Maintainer (one (1) included)	DC022
Operation Manual – Multilanguage CD (one (1) included)	MN040015
*Single-Patient Line (250 cm)	SP0003
*Transfer Set and Connector Tubing	MP2002

References

1. Endrikat J, Barbati R, Scarpa M, Jost G, Ned A. Accuracy and Repeatability of Automated Injector Versus Manual Administration of an MRI Contrast Agent – Results of a Laboratory Study. *Invest Radiol.* Jan 2018;53(1):1–5.
2. McDermott M, Kemper C, Barone W, Jost G, Endrikat J. Impact of CT Injector Technology and Contrast Media Viscosity on Vascular Enhancement: Evaluation in a Circulation Phantom. *Br J Radiol.* May 1 2020;93(1109):20190868.
3. Jost G, Endrikat J, Pietsch H. The Impact of Injector-Based Contrast Agent Administration on Bolus Shape and Magnetic Resonance Angiography Image Quality. *Magn Reson Insights.* 2017;10:1178623x17705894.
4. Auler MA, Heagy T, Aganovic L, Brothers R, Costello P, Schoepfet UJ. Saline chasing technique with dual-syringe injector systems for multi-detector row computed tomographic angiography: rationale, indications, and protocols. *Curr Probl Diagn Radiol.* 2006;35(1):1–11.



Ultravist (iopromid) injektions-/infusionsvæske, opløsning, D.SP.NR 6355. Ultravist 150 mg iod/ml, 240 mg iod/ml, 300 mg iod/ml, 370 mg iod/ml. Indikationer: Dette lægemiddel er kun til diagnostisk brug. Dosis kan variere afhængig af alder, vægt, kliniske problem, undersøgelsesmetoden og det område, der skal undersøges. Terapeutiske indikationer: Digital subtraktions-angiografi, computertomografi, flebografi, urografi, artrografi, hysterosalpingografi, fistulografi, cerebral angiografi, angiokardiografi, kontrastforstærket mammografi. Oplysninger om særlige populationer: Unge spædbørn (< 1 år), og især nyfødte, er modtagelige over for elektrolytforstyrrelser og hæmodynamiske ændringer. Ældre patienter eller patienter med nedsat leverfunktion: Dosisjustering er ikke nødvendig. Nedsat nyrefunktion: Da Ultravist næsten udelukkende udskilles i uændret form via nyrerne, forlænges elimineringen af iopromid hos patienter med nedsat nyrefunktion. For at reducere risikoen for kontrastmiddelinduceret nedsat nyrefunktion hos patienter med eksisterende nedsat nyrefunktion, skal den mindste mulige dosis anvendes. Ultravist er dialysabel. Kontraindikationer: Overfølsomhed over for iopromid, andre ioderede kontraststoffer eller over for et eller flere af hjælpestofferne (natriumcalciumedetat, trometamol, saltsyre (10 % w/v)). Særlige advarsler og forsigtighedsregler vedrørende brugen: Patienter, der oplever overfølsomhedsreaktioner, mens de tager beta-blokkere, kan være resistente over for behandling af overfølsomhedsreaktionen med beta-agonister. Hos patienter med kendt hyperthyreoidisme eller mistanke om samme, bør det overvejes at teste thyroideafunktionen før Ultravist administreres. Hos neonatale, især præmature spædbørn, der har fået Ultravist, enten gennem moderen under graviditeten eller i den neonatale periode, anbefales det at overvåge thyroideafunktionen, da en eksponering for for meget iod kan forårsage hypothyreoidisme, der muligvis kræver behandling. Patienter med CNSforstyrrelser kan have en øget risiko for neurologiske komplikationer i forbindelse med administration af iopromid. Patienter med moderat til svært (eGFR 44-30 mL/min/1,73 m²) eller svært nedsat nyrefunktion (eGFR <30 mL/min/1,73 m²) har øget risiko for post-kontrast akut nyreskade (PC-AKI) ved administration af intraarteriel kontrastmiddel og first pass nyreeksponering. Patienter med svært nedsat nyrefunktion (eGFR <30 mL/min/1,73 m²) har øget risiko for PC-AKI ved administration af intravenøs eller intraarteriel kontrastmiddel med second pass nyreeksponering. Hydrering: Der skal sikres tilstrækkelig hydrering før og efter intravaskulær indgivelse af Ultravist. Dette gælder især for patienter med multipel myeloma, diabetes mellitus, polyuri, oliguri, hyperurikæmi samt for nyfødte, spædbørn, små børn og ældre patienter. Prætestning: Sensitivitetstestning med en lille dosis kontrastmiddel anbefales ikke, da det ikke har nogen prædiktiv værdi. Interaktion: Biguanider/Metformin: Hos patienter med akut nyresvigt eller alvorlig kronisk nyresygdom kan biguanid elimineringen blive reduceret, hvilket fører til akkumulering og udvikling af mælkesyreacidose. Radioaktive isotoper: På grund af nedsat optagelse af radioaktive isotoper kan diagnose og behandling af thyroideaforstyrrelser med thyreotrope radioaktive isotoper hæmmes i op til flere uger efter administration af Ultravist. Bivirkninger: De hyppigst observerede bivirkninger (≥ 4 %) hos patienter, der får Ultravist, er hovedpine, kvalme og vasodilatation. De mest alvorlige bivirkninger hos patienter, der får Ultravist er anafylaktisk shock, åndedrætsstop, bronkospasmer, laryngealt ødem, faryngealt ødem, astma, koma, hjerneinfarkt, slagtilfælde, hjernedød, kramper, arytmier, hjerrestop, myokardiel iskæmi myokardieinfarkt, hjertesvigt, bradykardi, cyanose, hypotension, shock, dyspnø, lungeødem, respirationsinsufficiens og aspiration. Fordeling: Efter intravaskulær indgivelse distribueres Ultravist hurtigt til det extracellulære rum med en halveringstid på 3 minutter. Proteinbindingen i plasma ved en koncentration på 1,2 mg /ml plasma er 0,9 ± 0,2 %. Det kan ikke gennemtrænge den intakte blodhjernebarriere. Biotransformation: Der kunne ikke konstateres metabolitter hos mennesker efter administration af den klinisk relevante dosis af Ultravist. Elimination: Eliminationshalveringstiden hos patienter med normal nyrefunktion er ca. to timer uanset dosis. Opbevaringstid: 3 år. Pakninger, priser, tilskud, udlevering: Ultravist 370 mg iod/ml: 10 × 100 ml, 8 × 500 ml. For aktuel pris se www.medicinpriser.dk. Receptpligtigt. Udleveringsgruppe B. Ikke generelt tilskud. Indehaver af markedsføringstilladelsen: Bayer AB, Box 606, 169 26 Solna, Sverige. Dansk repræsentant: Bayer A/S, Arne Jacobsens Allé 13, 7. DK-2300 København S. Tlf. +45 45 23 50 00. Teksten er forkortet i forhold til det godkendte produktresumé. Fuldstændigt produktresumé kan rekvireres vederlagsfrit fra Bayer A/S, Tlf. 45 23 50 00. Læs venligst produktresumet inden ordinerings af lægemidlet. Dato for SPC: 17. februar 2025. #MA-M_ULT-DK-0004-1#

References:

1. Endrikat J, Barbati R, Scarpa M, Jost G, Ned A. Accuracy and Repeatability of Automated Injector Versus Manual Administration of an MRI Contrast Agent - Results of a Laboratory Study. *Invest Radiol.* Jan 2018;53(1):1-5
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The patient data that appear in this document are fictitious protected health information (PHI) and/or actual PHI from which all personally identifiable information (PII) has been removed or otherwise anonymized. No personally identifiable information is shown.

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