

SIEMENS

- Data Preparation
- Review
- ROI Quantification
- Kinetic Analysis

Dataset Source

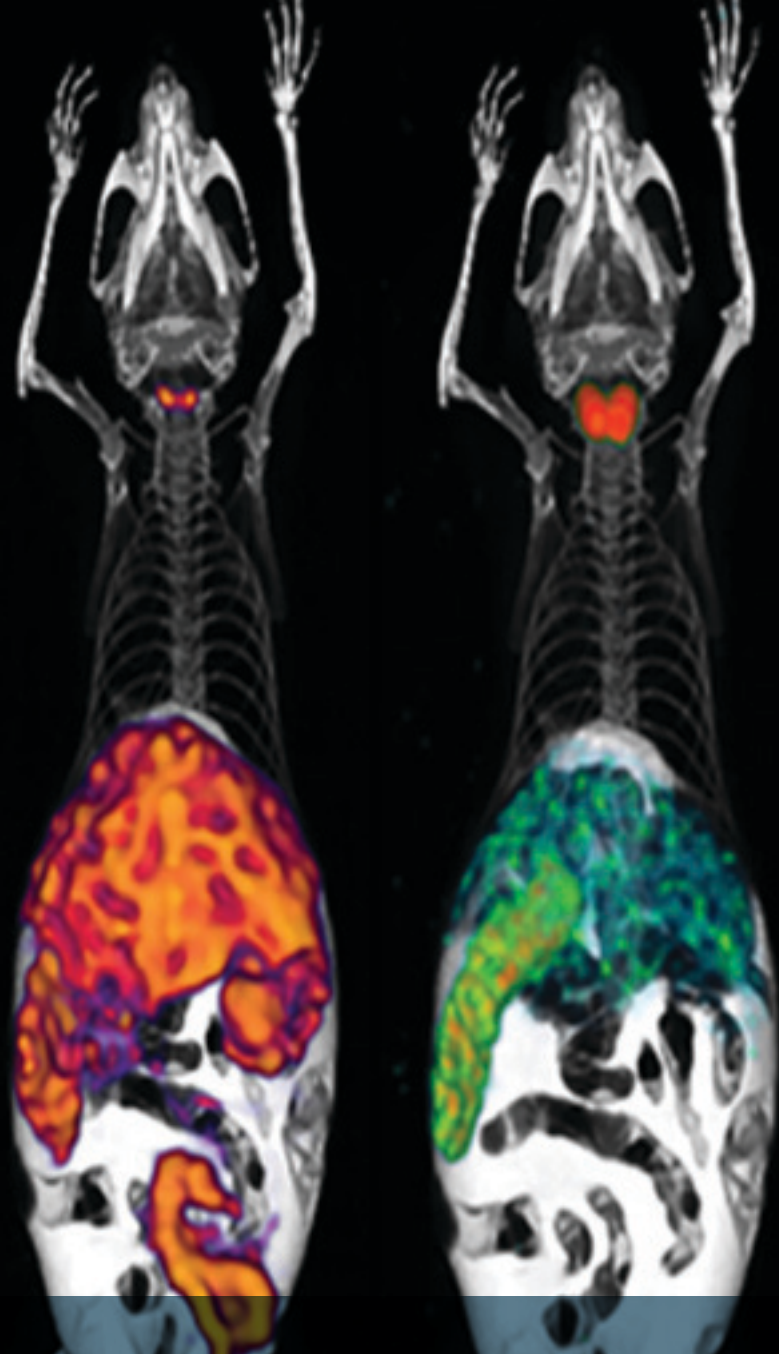
Image Layout Frame



Modify Filter Save



Undo/Redo



www.siemens.com/preclinical

Inveon Research Workplace 4.0

Empowering Research. Inspiring Discoveries.

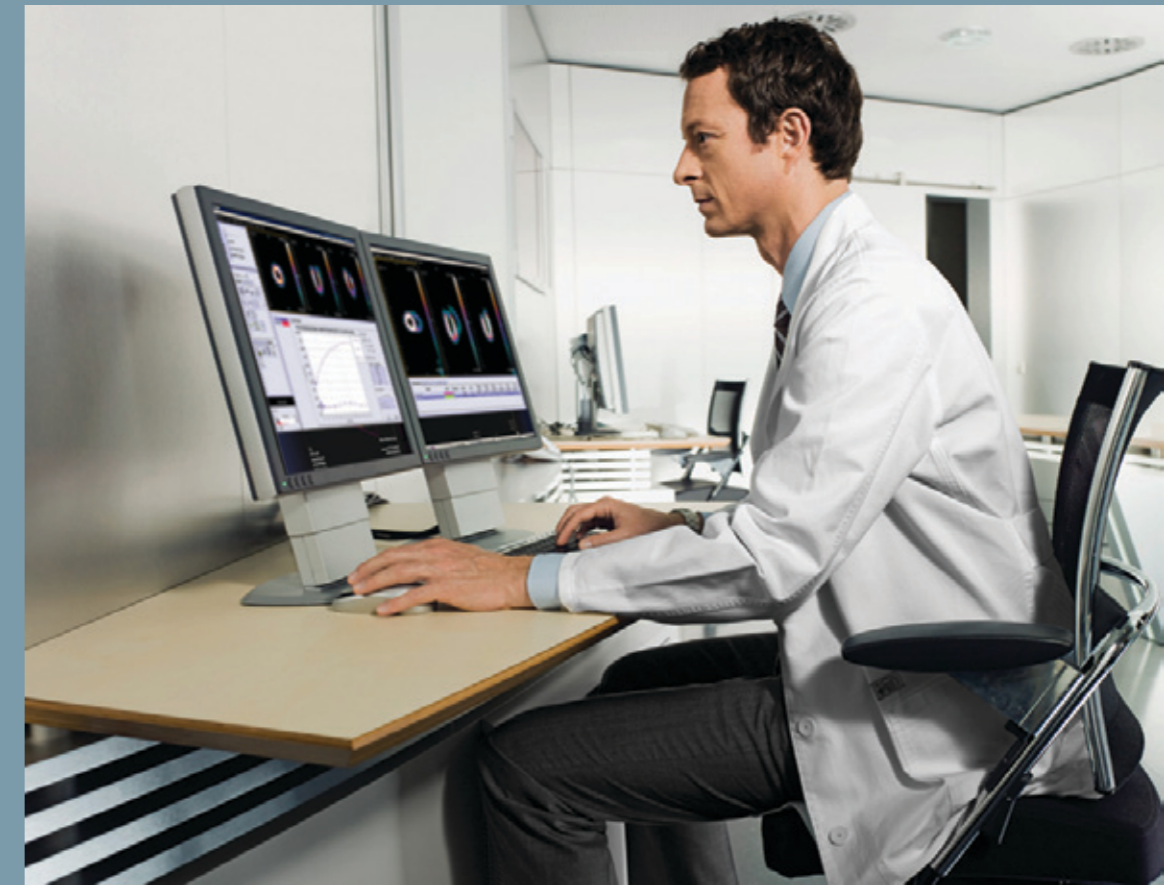
Answers for Life

Leadership

The Siemens Preclinical Solutions Vision

Preclinical imaging solutions from Siemens help researchers find answers to some of the most critical questions in basic and translational research—answers that ultimately lead to breakthrough discoveries that advance human health. With Inveon® and Inveon Research Workplace, Siemens has transformed the way in which biological research is performed by delivering state-of-the-art imaging, visualization and analysis solutions for performing cutting-edge *in vivo* small animal research.

As the use of imaging and analysis solutions continues to grow, researchers are continuously harnessing the power of preclinical imaging technologies and discovering new applications. These new applications drive the need for advanced visualization and analysis tools. Siemens Preclinical Solutions is continuing to deliver the most advanced image visualization and data analysis solutions so that researchers can spend more time on discovering the next major breakthrough in healthcare research.



Today's Challenges

Customizable visualization and analysis

With the rapid growth of preclinical imaging research, support for new applications, new segmentation routines and automated calculations is critical. This ability will allow researchers to redefine preclinical research. A programmable interface that allows researchers to create, store and recall customized programs will enable users to tailor IRW to their specific needs.

Efficient data sharing

Researchers need an easy way to share discoveries with their collaborators and generate consistent and reliable quantitative data comparisons for highly efficient research collaborations.

Workflow efficiency

Preclinical imaging workflow involves linear and iterative steps that are time-intensive and prone to introduction of errors during quantification and analysis. Researchers need tools and solutions to enhance workflow efficiency, consistency and reliability during analysis, and advance overall productivity.

Introducing Inveon Research Workplace 4.0 and Inveon Viewer

Empowering research. Inspiring discoveries.

Designed to help you overcome today's research challenges, Siemens Inveon Research Workplace 4.0 (IRW 4.0) and Inveon Viewer take preclinical imaging to all new levels by providing you with a powerful combination of image visualization and analysis tools. The introduction of IRW 4.0's novel Application Programmable Extension (APEX) toolkit pushes the boundaries even further by giving researchers the flexibility needed to tailor their software to precise, individual research needs.

With Inveon Viewer software, your research team can now visualize images on the acquisition workstation and truly experience the full benefit of the unique tools within IRW, enabling them to make sound decisions, rapidly. Designed to facilitate highly-productive research collaborations, Inveon Viewer enables you to expand your research program, inspiring the next generation of discovery.

Empowering Research. Inspiring Discoveries.

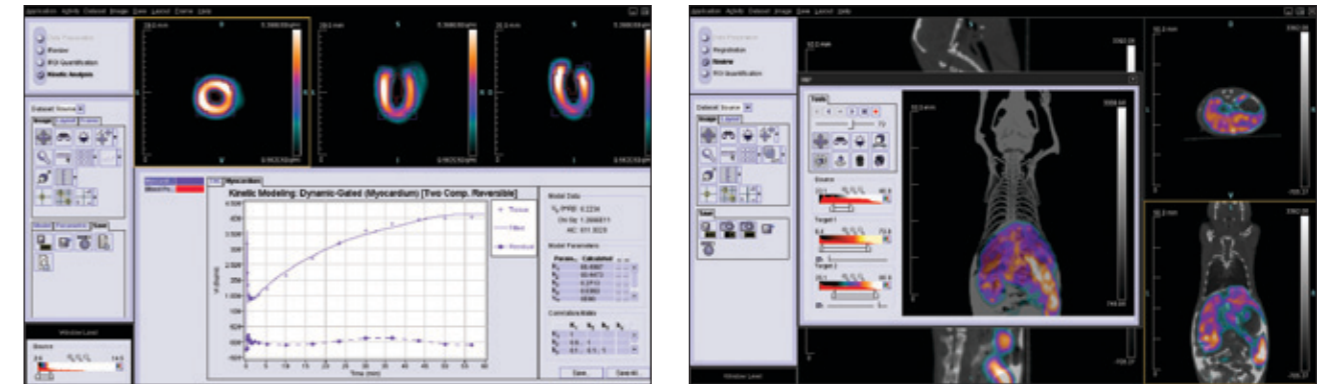
IRW 4.0 and Inveon Viewer

Redefining Research.

Perform digital image manipulations using customized equations to create new visualization methods to enable support for novel applications.

Benefits

- Perform digital image calculations using customized equations to create new visualization methods to enable support for novel applications
- Automate ROI calculations using programmable equations and convert cumbersome tasks into simple routines
- Expand the capabilities of IRW software to support novel applications by creating customized segmentation algorithms that can be saved, recalled and shared

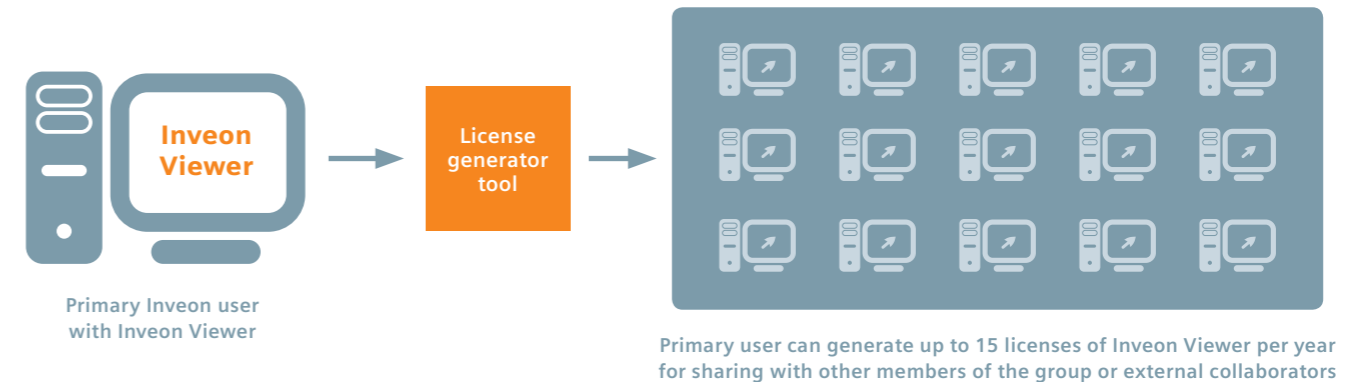


Sharing Discoveries.

The new Inveon Viewer software allows the user to generate and distribute up to 15 renewable licenses of the software, enabling the primary research investigator and their collaborators to work off the same software interface. This feature facilitates superior collaborations and increased quantitative accuracy in joint research projects.

Benefits

- Easily generate multiple licenses of the Inveon Viewer and share copies with your research collaborators
- Exchange data and images seamlessly using a common visualization and analysis platform and improve the overall quality of research
- Generate highly consistent quantitative results in research collaborations by utilizing the powerful set of ROI creation and editing tools within the Inveon Viewer
- Perform "on-demand" viewing and analysis of images directly on the acquisition workstation using Inveon Viewer



Advancing Productivity.

With the significant feature enhancements in IRW 4.0 and the capabilities of Inveon Viewer, researcher can enjoy a new level of workflow efficiency and advanced overall productivity in preclinical imaging research.

Benefits

- Perform advanced image manipulations directly using IRW 4.0 without the need to transfer images to other image analysis software packages
- Automated ROI calculations can be performed within IRW 4.0 without having to export data into external quantification tools
- Routine segmentation analysis on multiple animals becomes easy with the ability to create, save and recall custom segmentation algorithms in IRW 4.0
- The ability to view images directly on the acquisition workstation using Inveon Viewer allows for quick decisions on imaging protocols and results
- With access to Inveon Viewer, collaborators need not invest time and effort in importing and exporting images and introducing quantitative errors when transferring data

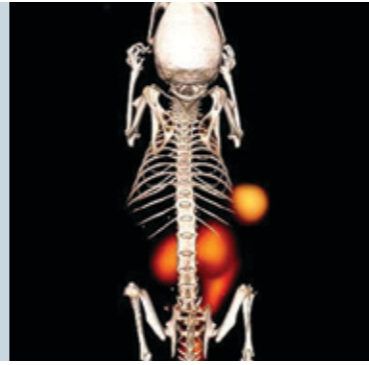
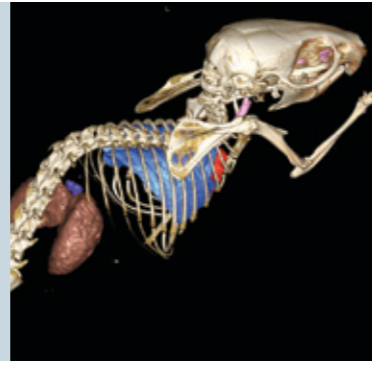
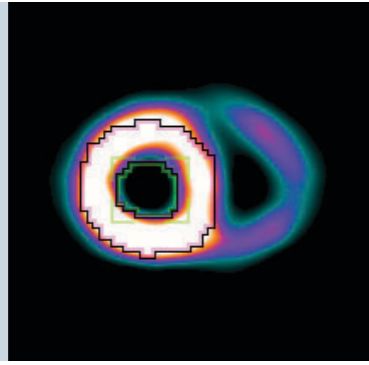
Collaboration workflow without Inveon Viewer



New imaging workflow with Inveon Viewer



PI - Principal Investigator



Your Return on Innovation

In order to take preclinical imaging to the next level of excellence, Siemens partners closely with its customers to define the direction of our next-generation technologies. With a focus on fulfilling your clinical, workflow and financial needs, our mandate is to deliver innovations that consistently:

- Lead the way in technological and medical advancement
- Maximize workflow efficiency
- Offer the best total cost of ownership

Siemens new IRW 4.0 and Inveon Viewer are designed to maximize your overall return on innovation—thus enabling you to perform advanced preclinical imaging applications and to collaborate efficiently.

“IRW 4.0 has improved our workflow and we are now able to process our data in a much quicker way than before. IRW 4.0 provides the ability to create optimized, integrated protocols for data processing for applications such as CT-DSA (Digital Subtraction Angiography) and DECT (Dual Energy CT). IRW 4.0 is our preferred software choice for routine preclinical imaging research activities and I have no doubt that it will benefit all Inveon users.” — Willy Gsell, PhD., Imperial College London, London, UK



Clinical Return

- User programmable interface allows development of customized applications
- Automated region of interest (ROI) calculations deliver reliable quantitative results



Workflow Return

- Automated segmentation enables rapid ROI creation that speeds workflow and delivers faster outcomes
- One-click launch of DICOM files enables fast loading and seamless compatibility with data from other modalities



Financial Return

- Customizable software options and expandable licenses satisfy a wide range of budgets
- Flexibility to create and support new applications provides obsolescence protection

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