

Operability

Stress-free Operation

Online help

The online help can be context linked with your current operation, for quick access to the answers.



Search function provided in the help page



Explanation is provided for each function

applications

2D Viewer	Slicer	Cardiac Ablation Analysis	Colon Analysis	Cystic Kidney Analysis
3D Viewer	2D Fusion	4-Chamber Analysis	ADC Viewer	RECIST Tracker
4D Viewer	Coronary Analysis CT	Aortic Valve Analysis	IVIM*	PERCIST Tracker
Dynamic Data	Cardiac Function CT	NM Viewer	MR Flow Analysis	Endoscope Simulator*
Fusion	Calcium Scoring	Combination	Liver Analysis CT	Breast Analysis MR*
3D Compositor	Cardiac Fusion	Brain Perfusion CT	Liver Analysis MR	Surface
3D Comparison	Coronary Analysis MR	Brain Perfusion MR	Lung Analysis/Air way	3D PDF
Vessel Extraction	Cardiac Function MR	4D Perfusion	Lung Analysis Resection	
2D Fat Analysis	Delayed Enhancement MR*	Dental MPR	Lung Analysis Scope	
3D Fat Analysis	Cardiac Perfusion MR	Sector MPR	Kidney Analysis	

*Not available for USA

Administration
The system Administration is easily undertaken by the site IT team, including user and application use management from one easily accessible web based utility.



*Specifications are subject to change without notice.
All brand names or trademarks are the property of their respective owners.
In some countries, regulatory approval may be required to import medical devices.
For the availability of these products, please contact your local sales representatives.*

FUJIFILM
Value from Innovation

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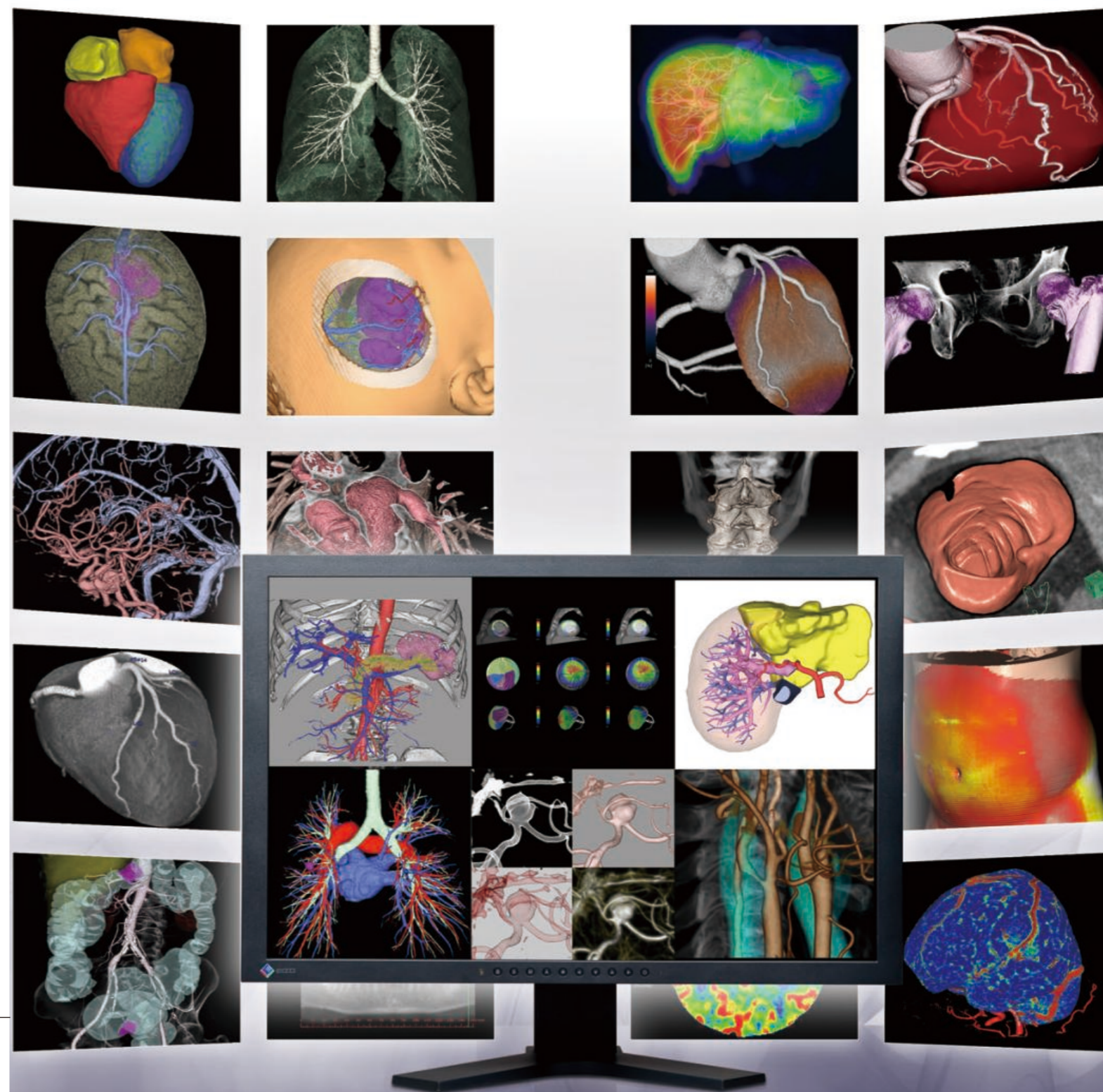
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Content of this brochure is based on the information available as of December 2015
This product is sold all over the world.

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SYNAPSE[®]
3D



Advanced SYNAPSE 3D quality for everyone



[SYNAPSE 3D QUALITY]

Experience Advanced clinical workstation.

SYNAPSE 3D, uses unique image recognition technologies to automatically extract organs and vessels. The technology enables automatic extraction of lung, lung lobes the bronchus, liver, portal vein and hepatic vein extraction. This feature makes possible a large variety of 3D analysis, such as visualization of chronic respiratory disease and Liver and Kidney preoperative simulations. In addition, with our unique image compression and transmission technologies, the high-speed communication in the thin client environment provides ease of access to 3D analysis from anywhere in the facility with stress free operation.

Visualization

High quality images

As a pioneer, within the medical imaging field we have adapted image recognition technologies, to create our unique "Image Intelligence". This enables quicker and more accurate image recognition.



Applies Fujifilm image analyze technique which used on FUJIFILM digital camera

Smooth workflow

More efficiency for team medical care

Being able to save the analyzed work within a common accessible platform of SYNAPSE 3D, it is possible to share the work easily with other users. This feature enables a smoother workflow and cooperation with other clinicians.

Operability

Stress-free operation

SYNAPSE 3D provides seamless high quality images with easy-to-use editing tools. The interface layout can be changed from a simple mode to a professional mode, according to the user's purpose and level of knowledge.

Visualization

More quickly, more accurately and more widely

Application

Expanding SYNAPSE 3D Clinical analysis

Image recognition technology: One-click operation and improvement reproducibility
Smart tracking, bone removal and automatic separation of arteries and veins are available.



Smart tracking

Based on the previously stored information, the areas recognized as blood vessels are extracted.



One-click operation to extract the areas that touches bones



Bone removal

Bones are extracted or removed with one click based on the CT value and the shape of the region of interest recognized by the FUJI FILM Algorithm technology.



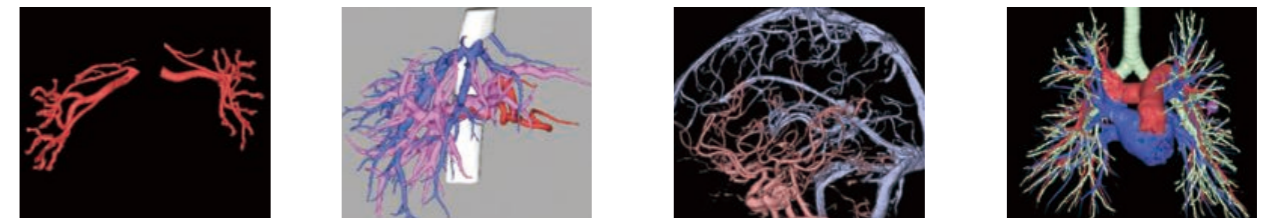
Skull removal

Lower extremity bones removal



Vessels

Vessels are extracted with one click by using image recognition technology.



Renal Artery

Portal Vein / Hepatic Vein / Hepatic Artery

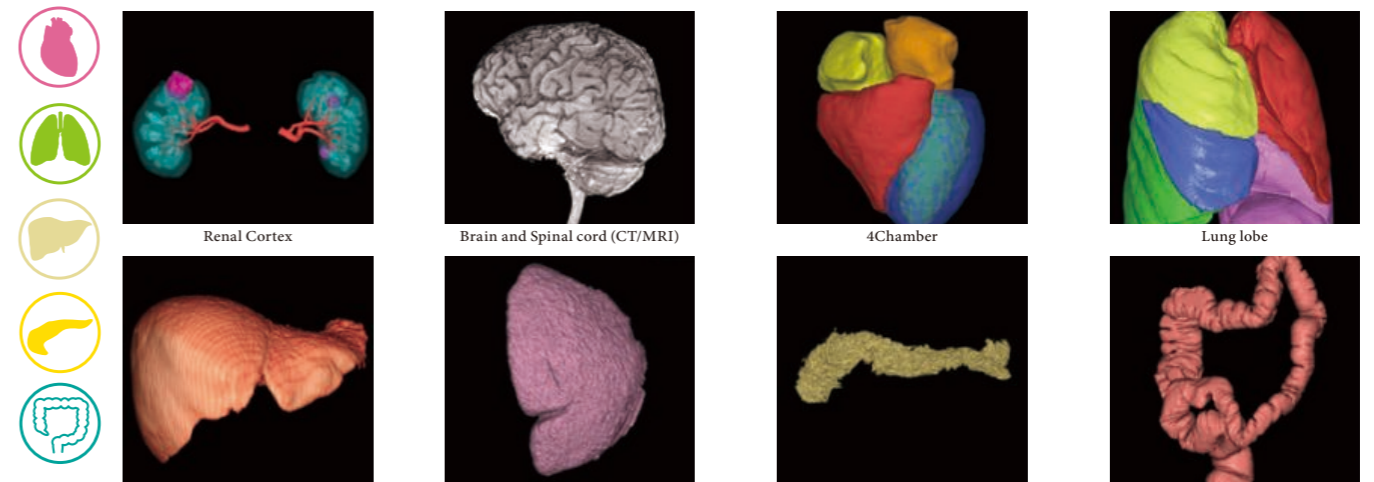
Cerebral Arteries and Vein separation

Abdominal Artery Portal Vein systems/ Bronchus, Pulmonary Artery and Vein



Organs

Image Intelligence® makes it happen to extract organs and simplify your work.



Renal Cortex

Brain and Spinal cord (CT/MRI)

4Chamber

Lung lobe

Liver (CT/MRI)

Spleen

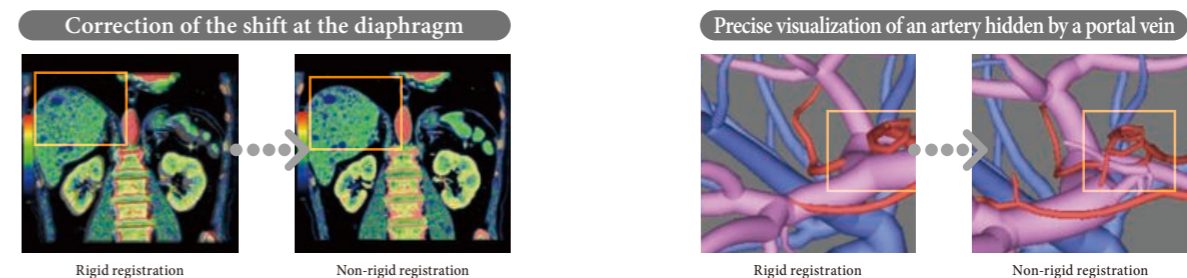
Pancreas

Colon



Non-rigid registration

Non-rigid registration enables SYNAPSE 3D to move an organs in images acquired at different phases, and different time points to be corrected.



Correction of the shift at the diaphragm

Precise visualization of an artery hidden by a portal vein

Rigid registration

Non-rigid registration

Rigid registration

Non-rigid registration

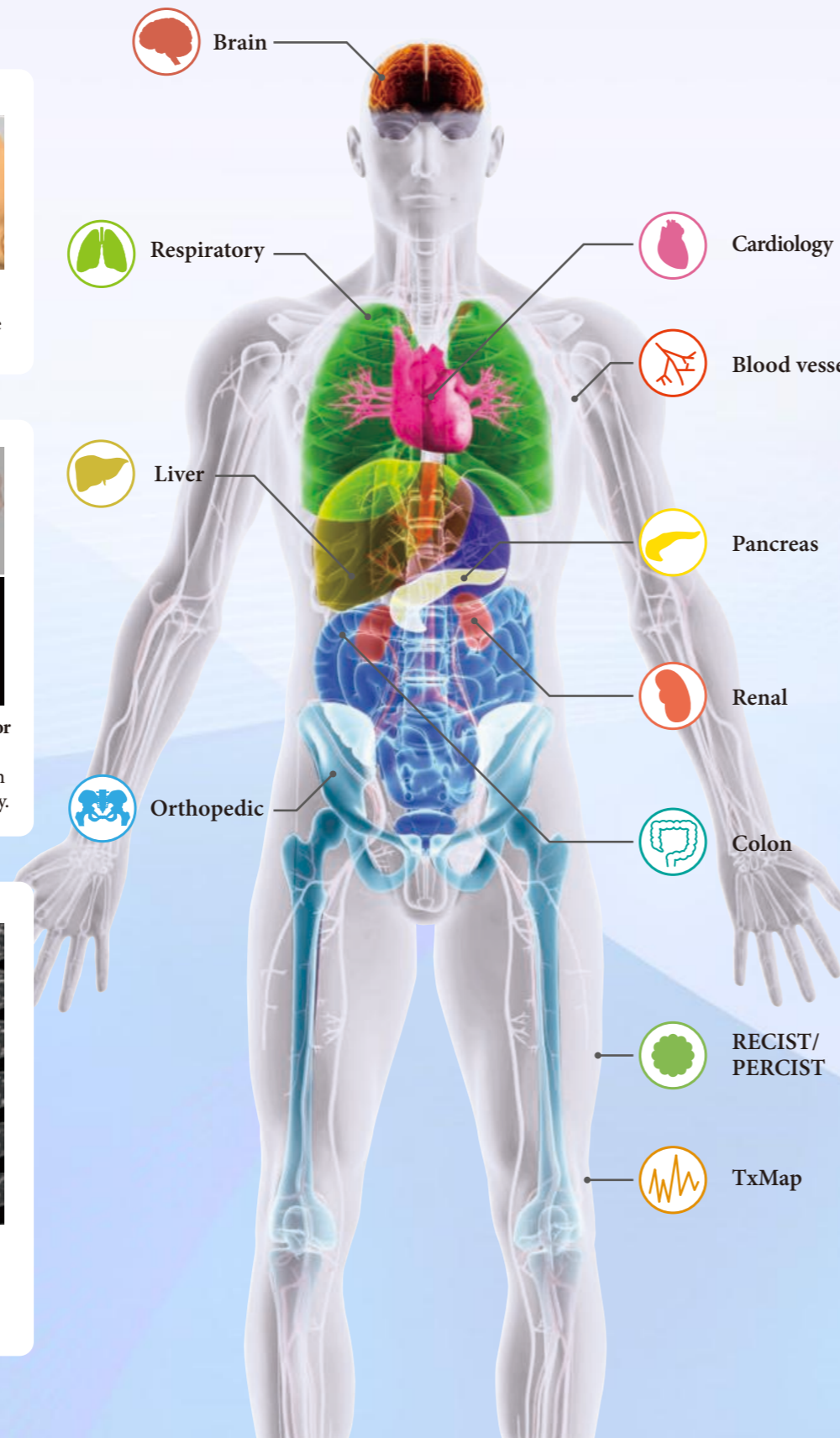
Visualization

Quicker, more Accurately and more Information

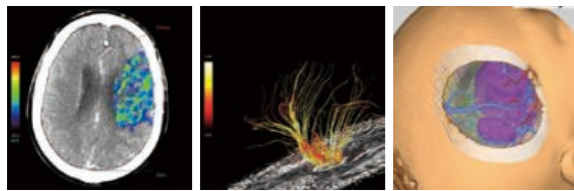
Application

Expanding SYNAPSE 3D Clinical analysis

To reduce time working on the 3D workstations, we continue to expand our image recognition technology to variety of areas. Such as, oncology PET /SPECT, the respiratory system with automatic extraction of the bronchus and separation of lung lobes. Liver analysis (CT) automatically extracts the portal and hepatic vein, areas which can remarkably reduce complicated processes and speed up analysis.

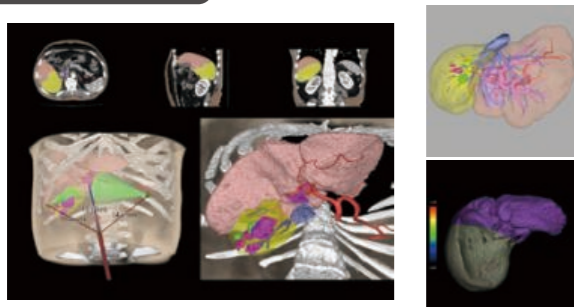


Brain



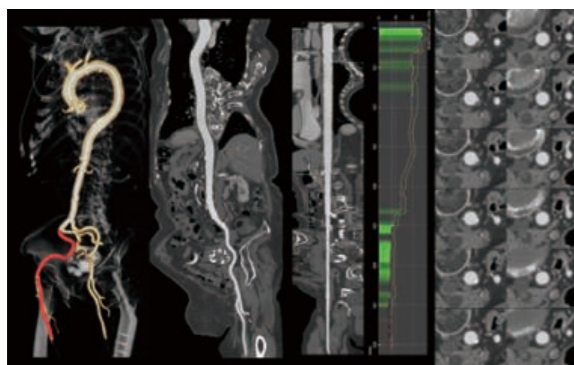
3D/4D Brain Perfusion/ Craniotomy/Tensor Analysis
Craniotomy/Tensor Analysis makes it possible to pre-operative plan surgeries.

Liver



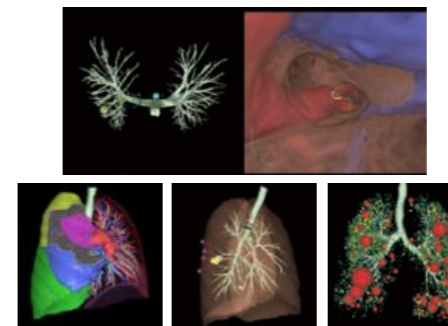
Liver Analysis (CT)/Liver Analysis (MRI)/Endoscope Simulator
Liver Analysis (CT) allows users to make Volumetric and pre-operative simulations and allows the user to move it into an Endoscope Simulator which is able to plan laparoscopic surgery.

Vessels



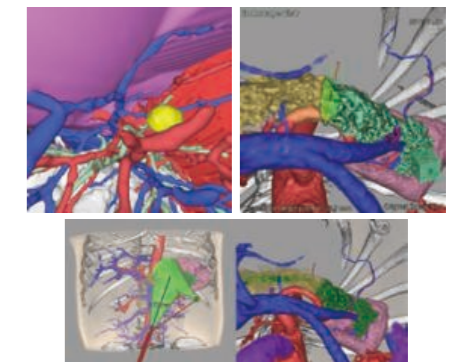
General CPR
General CPR can perform aortic and general stent simulations and measurements allowing the clinician to make informed choices about what device to use.

Respiratory



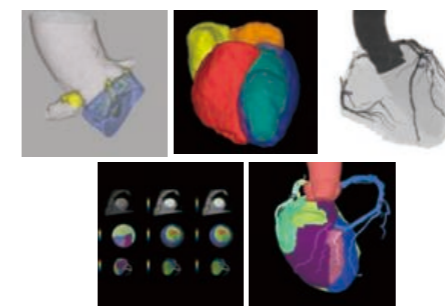
Lung Analysis Resection/Lung Analysis Scope/ Lung Analysis Airway
These can be helpful for identifying and measuring lung lobe volume, Lung resection preoperative simulation (especially VATS operation) and Pre-check Bronchoscope procedures.

Laparoscopic Surgery



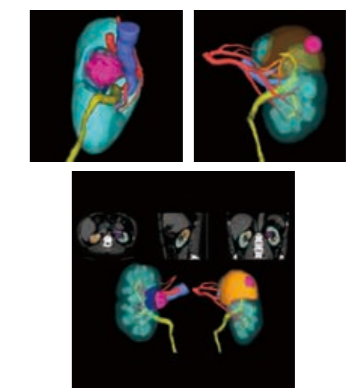
Endoscope Simulator
This application makes it possible to plan accurate Port placing for enhanced visualization during laparoscopic surgery for Renal, Colon, Liver and Lung interventions.

Cardiology



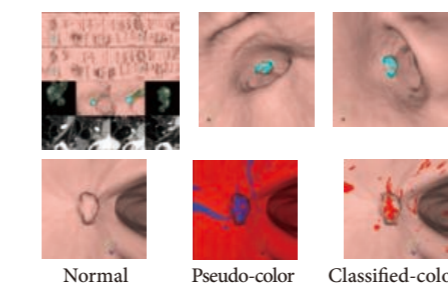
Aortic Valve Analysis/4Chamber/Coronary Analysis (CT/MRI)/ Cardiac Fusion/MMAR (Myocardial Mass at Risk)
These applications allow users to observe Cardiac Functionality, Coronary vessels and myocardial perfusion territory. Planning TAVI (TAVR) measurements, it is possible to simulate valve insertion and catheter approach.

Renal



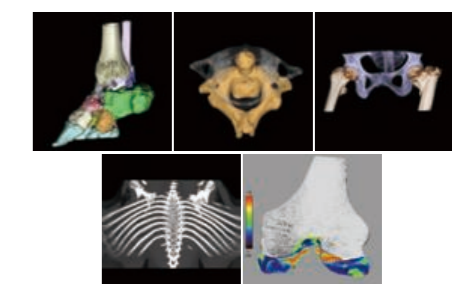
Kidney Analysis/Cystic Kidney Analysis
Enable the users to plan Renal Cortex Volumetry and pre-operative planning such as artery territory extraction and enucleation.

Colon



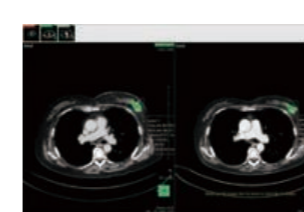
Colon Analysis
Allows the users to observe Colonic CT scans, incorporating Filet view, a Virtual endoscope view, Digital cleansing, Torous enhancement and Depth MIP functionality. Enhancing the users experience and aiding fast throughput of Virtual Colonic CT's in a busy facility.

Orthopedic



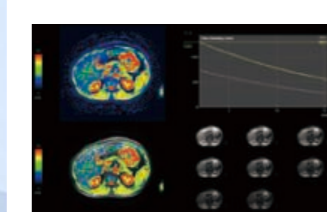
Tx Map/3D Viewer Bone separation/General CPR/Slicer
Tx Map can visualize 3D map Bone and Tx map surface, and Bone separation functionality can help to observe joints easily.

Oncology



RECIST/PERCIST
It is possible to perform quantitative evaluation based on the RECIST & WHO international criteria, utilizing the image recognition technology's to speed up and aid analysis.

Tx Map

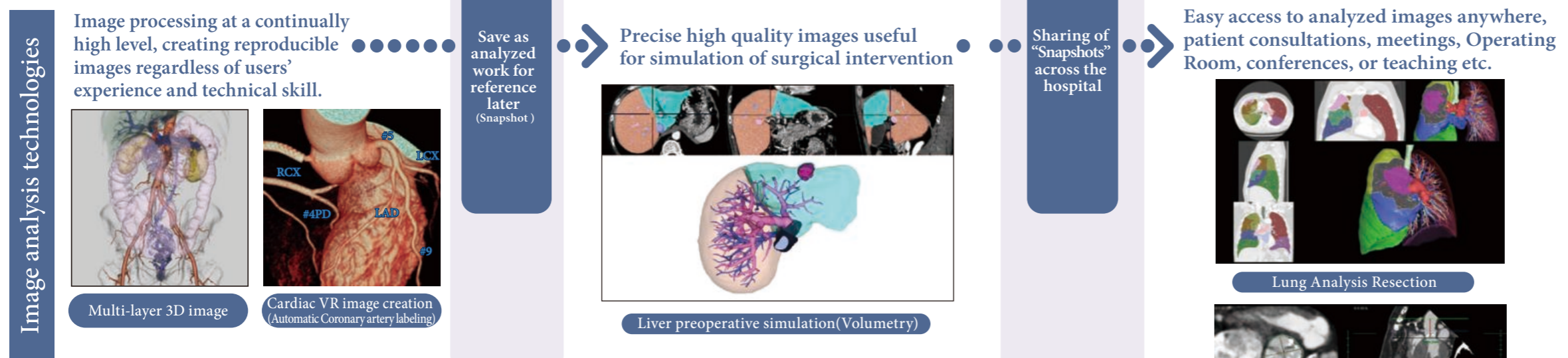
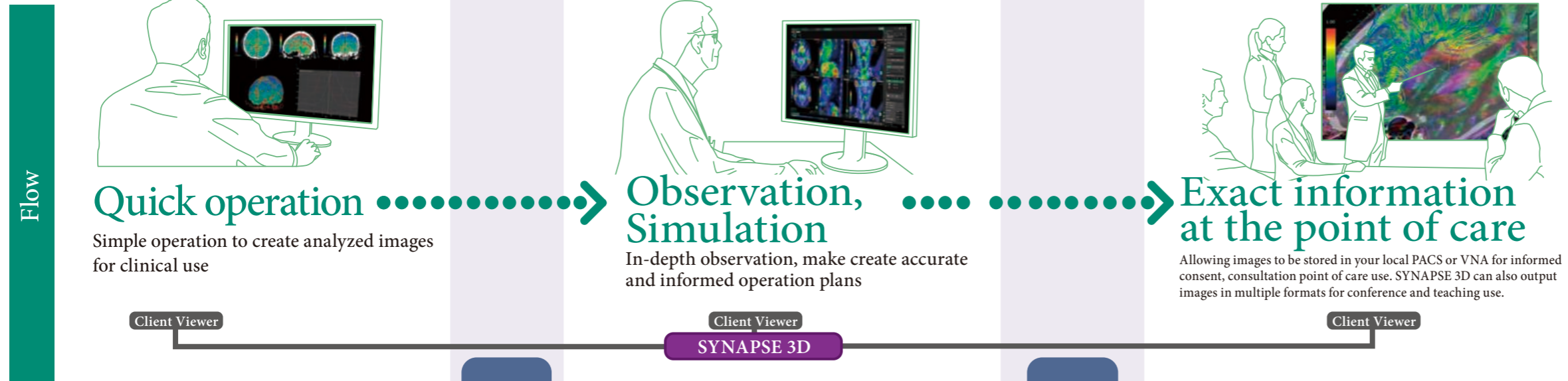


Tx Map
This application analyses the iron content of Liver and water content of Cartilage within the Joint spaces.

Smooth workflow

More efficient for the medical care team:

Using a common platform and a built in snapshot capability, it is possible to share the information easily with other users. This feature enables smooth workflow to aid greater team cooperation between users both Radiology and other Clinical specialisms.



Mobile Tablet Viewer

Our 3D image viewing platform can be used on a mobile device allowing more flexible and mobile working environment.

3D PDF

Studies can be reported directly into PDF format for ease of distribution to clients and clinicians alike.



Preprocessing

With the series description specified within the settings, the optimum functions or applications automatically launch when the data is received, and create snapshots to start detailed analysis from saving time to busy clinicians. The preprocessing functionality is available for applications such as Coronary Artery Analysis and Cerebral Vessels Extraction, and Liver Analysis or those for simulation of surgeries that otherwise would require manual efforts to process images.

