2017

Comparison: Philips ISP vs Siemens (Syngo.Via) Suite

PHILIPS

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Pg. #

1. Overview: An Imaging Solution

A. Syngo. Via: Key Product Highlights:

1. Syngo. Via **Licensing Model** based on:

> The Siemens licensing model is based on their tool which works as (concurrent user + number of user for each applications). They have set of Basic applications and Advance applications.
>
> *Note: The Philips ISP licensing model is based on the Concurrent User / Resource Based Licensing mode and hence cannot be compared "apple-to-apple" with the Siemens Syngo licensing model.* (ISP9 License document link)*

2. **Smart Positioning: mostly supporting bundled deals** & *syngo.via multi-modality routine reading functionality and Pre fetch comes with every syngo.via system is available to all users* (i.e. is not licensed per user or seat). All other optional syngo.via applications and engines are licensed per concurrent user + Advance application license)

   Scalability recommendations for new syngo.via VB20A SW and HW apply:
   - Server based workstation with (1-2 CCU)* (they have capability to provide 1 CCU at console level)
   - L Server (2-7 CCU)
   - XL server (5- 15 CCU)
   - XL Server with 10TB storaSyngo.Via (5-15)

   VB20A requires dedicated server hardware to provide high performance and reliable image rendering functions. The supported server hardware is subject of the VB20A release information. Also for CT View & GO Workplace a special hardware is available.

Recommended user	Server based workstation	L server	XL server	XL server 10TB
Recommended number of concurrent users 1	1 to 2	2 to 7	5 to 15	5 to 15
Max. number of slices for concurrent rendering2/3	16,000	24,000	46,000	46,000
Max. number of slices for Short-Term Storage without compression4	540,000	1,200,000	4,500,000	9,100,000

- ❖ Transmission between server and client can be compressed depending on configuration profiles.
- ❖ The default setting for displaying images is lossless compression for the final displayed images on the monitor. During image interaction, the images might be shown with a reduced resolution.
- ❖ The user is constantly informed about the current image quality.

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1. Actual numbers depend on case mix and applications in use.
2. Typical loading performance for image data based on 512 x 12 bit matrix on latest server hardware. Results may vary.
3. CT Dual energy applications load two image sets (images for low kV plus images for high kV) the max. number of slices is reduced accordingly.
4. Max. Number of slices for Short-Term Storage without compression (approx.).
5. Please contact your local sales representative for further information on availability in your region, technical requirements, and limitations.
For special workflow support and extended workstation is required.
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3. Hardware & Software

component	Siemens	Philips
Processor	Intel Quad-Core 2.8 Ghz or equivalent	2 cores @ 1.8 GHz / 4 cores @ 1.6 GHz
RAM	≥ 8 GB	>_ 4GB
Hard drive (free space for client software)	≥ 3 GB	>_ 3GB
Graphic card	Supports OpenGL 2.0 or higher (for example NVIDIA Quadro K600)	Native DirectX 9.c support, Native GDI+ Support, Native Windows Aero interface support and 128MB RAM (for the graphic card)
Graphic card	16–32 bits	

4. Clinical strength
- Strong modality install base
- Syngo. Interventional (Viewer, QCA, QCA Bifurcation, IZ3D,LVA and QVA) Body perfusion, CT/MR Perfusion, MR diffusion, MSK analysis (ribs and vertebrae automatic numbering), pre-fetch function is offered as standard functionality and Dual energy applications.
- Application distribution between Syngo.Via Engine & Engine Pro
- Profound Medical and Siemens Enter Strategic Agreement to Develop Prostate Cancer Care.

5. Implementation & Customer support
- Syngo. Via VB20A deployed over Server and VMware also.
- Standard customer support from 8:00 am to 6:00 pm (In DACH & NA market they even provide 24/7 support as per service contract.
- Siemens Syngo.Via, wide-spread direct salesforce & broad distributor network covering in EMEA, APAC & NA market.

B. Snapshot: Quick Comparison

PHILIPS	SIEMENS
Modality OEM	Modality OEM
Customer Support: Mon. – Fri. with ISP/ICAP focus)	Customer Support: Mon. – Fri. with ISP/ICAP focus)
Strong in MR apps, MMTT,	Strong in Interventional apps, Duel energy and
Strong local presence (esp. in EMEA) in most markets for ISP Sales and Service	Syngo.Via has strong presence in DACH market & also good in overall EMEA
Defined roadmap for vendor neutrality	RSNA 2017 they spoke strong improvement in Vendor neutral capability
ICAP at #3 KLAS Report	AW Server #5 Category
ICAP service contracts priced between 9% to 16% of CTP	Syngo.Via service contracts priced between 8% to 12% of offer price quote.(mainly in DACH)
IntelliSpace Portal 9 Brochure (URL Link)	Syngo. Via Datasheet (URL Link)

2. High level feature Comparison

Philips-Siemens Application Comparision				
Siemens				Philips
CT				CT
syngo.CT Neuro Engine	Sellable unit/ Apps	Package level	Features	
	syngo.CT Neuro DSA	Advanced	CTA subtraction and DSA based bone removal,Recalculation mode Follow-up workflow Fast toggling (bone, no bone) Best plane functionality Findings navigator & reporting Aneurysm Segmentation (since VA11)	MM AVA
	syngo.CT Neuro Perfusion	Advanced	Calculation of Perfusion Parameter Volumes based on two different perfusion models,Allows time point and volume navigation,Dedicated Motion Correction,4D Noise Reduction, Automatic segmentation of brain, parenchyma,Automatic vessel and hemisphere, plane tification,Normalization Multiparameter View,Result Storage (Enhanced CT,Color RGB,CTGrayscale) Flexible Penumbra tool,Dynamic Evaluation and Time,attenuation curves,Statistical ROI analysis,Data Export (statistics, curves) for statistical evaluation,Reporting and Findings Handling,new restriction starting	CT Advanced Brain Perfusion
syngo.CT Neuro Engine Pro				
	syngo.CT Neuro DSA	Same as in colom 7c	same as in colom 7D	MM AVA

	syngo.CT Neuro Perfusion	Same as in colom 8c	same as in colom 8D with Support datasets from all SIEMENS scanners	CT Advanced Brain Perfusion
	syngo.CT Dynamic Angio	Advanced	4D Vessel View (Movie),Dynamic Evaluation and Time,attenuation curves (Testbolus),Extraction and storage of arbitrary Phase Volumes,Creation and storage of Temporal,MIP, Average and Baseline,volumes,Loads all Siemens CT dynamic data,Allows time point and volume,navigation,Dedicated Motion Correction,(Neuro, Body, Myocardium),4D Noise Reduction,Bone Removal,Statistical ROI analysis,Data Export,Reporting and Findings Handling.	MM AVA
syngo.CT Cardio-Vascular Engine				
	syngo.CT Vascular Analysis	Basic	Automatic Bone removal (also available as GR plug in) Automatic Table removal (also available as GR plug in) Review marker Manual vessel tracking Curved & cross-sect. MPR C-Arm angulations for the intervention Integrated reporting	MM AVA
	syngo.CT Coronary Analysis	Basic	Review marker,Heart isolation,Plaque visualisation,Movie (beating heart),Manual coronary tracking,Cardiac planes, Curved & cross-sect. MPR C-Arm angulations for the intervention Integrated reporting	CT Comprehensive Cardiac

	syngo.CT Cardiac Function	Advanced	Fully automatic left ventricular function analysis including myocardial wall Standard and blood volume analysis modes Fully automatic ventricular volume curve, global function parameters and polarmap visualization of local function arameters,Automatic aortic and mitral valve planes,Movie Series,C-Arm angulations for the intervention and integrated reporting	CT Comprehensive Cardiac
	syngo.CT CaScoring	Advanced	Total and standard Calcium Scoring and coronary age calculation.	Ca Scoring
syngo.CT Cardio-Vascular Engine Pro				
	syngo.CT Vascular Analysis	Advanced	along with basic it also have CPR radial and cross-sectional ranges VesselSURF for vessel navigation Semi-automatic vessel tracking Semi-automatic stenosis measurement,Calcium removal (single energy) Direct Angio: Dual Energy Bone & Calcium Removal (Depending on Dual Energy Licenses)	MM AVA
	syngo.CT Coronary Analysis	Advanced	Along with basic feture CPR radial & cross-sectionalranges,Angio View VesselSURF for vessel navigation Automatic coronary tracking and labeling including SVG bypass tracking and labeling,1-click vessel tracking with multi-phase propagation,1-click stenosis measurement Image sharpening for B46 impression	CT Comprehensive Cardiac
	syngo.CT Cardiac Function	Advanced	same as in 16D	CT Comprehensive Cardiac
	syngo.CT CaScoring	Advanced	Total and standard Calcium Scoring and coronary age calculation.	Ca Scoring

	syngo.CT Vascular Analysis – Autotracer	Advanced	Automatic tracking and labeling of main body vessels:Carotids,Aorta,Renals and Leg Runoffs	MM AVA, CT Comprehensive Cardiac
	syngo.CT Cardiac Function – Enhancement	Advanced	First pass myocardial enhancement visualisation based on single energy CT data.	CT Comprehensive Cardiac
	syngo.CT Cardiac Function – Right Ventricle	Advanced Dependent	Fully automatic right ventricular function analysis	CT Comprehensive Cardiac
	syngo.CT Rapid Stent Planning	Advanced Dependent	Automated filling of arbitrary forms PDF, i.e. for automated stent ordering No upgrade for VA20 customers	CT AVA Stent Planning
syngo.CT Acute Care Engine				
	syngo.CT Neuro DSA	Advanced	CTA subtraction and DSA based bone removal,Recalculation mode Follow-up workflow Fast toggling (bone, no bone) Best plane functionality Findings navigator & reporting Aneurysm Segmentation.	MM AVA
	syngo.CT Neuro Perfusion	Advanced	Calculation of Perfusion Parameter Volumes based on two different perfusion models Allows time point and volume navigation,Dedicated Motion Correction,4D Noise Reduction,Automatic segmentation of brain,parenchyma,Automatic vessel and hemisphere,plane identification Normalization,Multiparameter View,Result Storage (Enhanced CT,Color RGB, CT Grayscale) Flexible Penumbra tool,Dynamic Evaluation and Time attenuation curves Statistical ROI analysis Data Export (statistics, curves) for statistical evaluation, Reporting and Findings Handling,new	CT Advanced Brain Perfusion

			restriction starting with VA30: supports datasets <=4cm volume coverage and max. 16 slices per volume	
	syngo.CT Vascular Analysis	Advanced	same as 19 D	MM AVA
	syngo.CT Coronary Analysis	Advanced	same as 20 D	CT Comprehensive Cardiac
	syngo.CT Cardiac Function	Advanced	same as 16D	CT Comprehensive Cardiac
	syngo.CT CaScoring	Advanced	same as 22D	Ca Scoring
syngo.CT Acute Care Engine Pro				
	syngo.CT Neuro DSA	Advanced	same as 28D	MM AVA
	syngo.CT Neuro Perfusion	Advanced	same as 29D	CT Advanced Brain Perfusion
	syngo.CT Dynamic Angio	Advanced	same as 12D	MM AVA
	syngo.CT Vascular Analysis	Advanced	same as 19 D	MM AVA

	syngo.CT Coronary Analysis	Advanced	same as 20 D	CT Comprehensive Cardiac
	syngo.CT Cardiac Function	Advanced	same as 16D	CT Comprehensive Cardiac
	syngo.CT CaScoring	Advanced	same as 22D	Ca Scoring
	syngo.CT Vascular Analysis – Autotracer	Advanced	Automatic tracking and labeling of main body vessels:Carotids,Aorta,Renals,Leg Runoffs	MM AVA, CT Comprehensive Cardiac
	syngo.CT Cardiac Function – Enhancement	Advanced	First pass myocardial enhancement visualisation based on single energy CT data.	CT Comprehensive Cardiac
	syngo.CT Cardiac Function – Right Ventricle	Advanced dependent	Fully automatic right ventricular function analysis	CT Comprehensive Cardiac
	syngo.CT Rapid Stent Planning	Advanced dependent	Automated filling of arbitrary forms PDF, i.e. for automated stent ordering	CT AVA Stent Planning
syngo.CT Oncology Engine				
	syngo.CT Segmentation	Advanced	Automatic segmentation of lung, liver, lymph nodes and general lesions, automated RECIST/WHO calculation, volume rendering of segmentation (Recist 1.1), hybrid markup (PET/CT segmentation and measurements).	Enhanced MMTT
	syngo.PET&CT Cross-Timepoint Evaluation	Advanced	Automatic calculation of follow-up % change values (volume and max. SUV) and tumor burden growth rate.Visualization of up to four timepoints concurrently. Trend finding values across all timepoints.	Enhanced MMTT

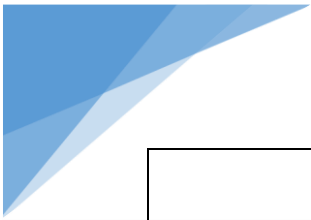|	syngo.CT Colonography	Advanced	Registered navigation (prone/supine)Parallel flight prone/supine visualization 3D reading (Fly through) Global view (solid/semi-transparent) Panoramic view Deletion of small intestines, Stool tagging Distance to rectum	CT Virtual Colonoscopy
syngo.CT Oncology Engine Pro				
	syngo.CT Segmentation	Advanced	Automatic segmentation of lung, liver, lymph nodes and general lesions, automated RECIST/WHO calculation, volume rendering of segmentation (Recist 1.1), hybrid markup (PET/CT segmentation and measurements).	Enhanced MMTT
	syngo.PET&CT Cross-Timepoint Evaluation	Advanced	Automatic calculation of follow-up % change values (volume and max. SUV) and tumor burden growth rate.Visualization of up to four timepoints concurrently. Trend finding values across all timepoints.	Enhanced MMTT
	syngo.CT Colonography	Advanced	Registered navigation (prone/supine)Parallel flight prone/supine visualization 3D reading (Fly through) Global view (solid/semi-transparent) Panoramic view Deletion of small intestines, Stool tagging Distance to rectum	CT Virtual Colonoscopy
	syngo.CT Lung CAD	Advanced	Algorithm for automatic Computer Aided Detections of solitary pulmonary nodules,partial-solid nodules and Ground-Glass Nodules (GGN) of the lung.	CT Lung Nodule & CAD
	syngo.CT Colonography – PEV	Advanced Dependent	Polyp enhanced viewing (PEV) PEV marker, autoprocessing	CT Virtual Colonoscopy CAR
	syngo.CT Colonography Advanced	Advanced Dependent	Along with 53D standard featues + Polyp lens functionality, Stool Subtraction	CT Virtual Colonoscopy

	syngo.PET&CT Onco Multi-Timepoint	Advanced Dependent	Automatic calculation of follow-up % change values (volume and max. SUV) and tumor burden growth rate.Visualization of up to four timepoints concurrently. Trend finding values across all timepoints.	Enhanced MMTT
Individual applications				
	syngo.CT Cardiac Function - Valve Pilot	Advanced Dependent	Fully automatic for TAVI Planning Measurement	CT TAVI Planning
	syngo.PET Segmentation	Advanced	Volumetric analysis via iso-contouring, segmentation editing (correction) and automatic segmentation. Functional quantification, SUV evaluation, Peak calculation and PERCIST evaluation. PET virtual planar reconstruction to assist NaF evaluation. EQ.PET for SUV harmonization with a reference, and volumetric analysis with TLG.	Enhanced MMTT
	syngo.CT Pulmo 3D	Advanced	Segmentation of lung Evaluation of lung tissue using low and high threshold, ranges percentiles, clusters Output of results,in table form as histograms as color overlays Segmentation of lung lobes,evaluation of airways	CT COPD
	syngo.CT Body Perfusion	Advanced	Evaluation of organ and tumor perfusion Calculation of parameters based on contrast enhanced dynamic CT data,blood flow, blood volume,mean transit time,permeability from sets of arterial and portal venous,component of hepatic perfusion evaluation of ROIs visual inspection of time density curves	CT Body Perfusion
	syngo.CT Myocardial perfusion	Advanced	4D Myocardium Perfusion evaluation Motion Correction for myocardium Blood pool removal Calculation of parameter maps (MBF,MBV,...)	CT Dynamic Myocardical Perfusion

	syngo.CT Dental	Advanced	Define a reference plane and a centerline Create panoramic and paraxial views based on refernece plane and centerline Outline mandibular canal Print in TrueSize	CT Dental
	syngo.CT Liver Analysis	Advanced	Segmentation of liver, tumor, and vessel tree Evaluation of volumes of segmented anatomies Visualization of volumes and vessel trees Insertion of planes into liver and calculation of partial volumes	CT Liver Analysis
	syngo.CT Bone Reading	Basic	Rib and Spine labeling only on standard MPR views (no unfolded rib/spine display) Necessary to run combined "Onco+Vascular+Bone Workflow" in case no CT_ADVANCED_BONE_READING is available.	CT Acute MultiFunctional Review
	syngo.CT Bone Reading	Advanced	Rib and Spine stretching and labeling for interactive Bone Reading.Adaption of complex anatomical structures according to diagnostics needs.	CT Acute MultiFunctional Review
	syngo.CT PE CAD	Advanced	Second reader tool compatible with CT systems with CAD processing, result generation and navigation tools. Used for review of PE CAD results.	CT Pulmonary Artery Analysis CAD
	CT Onco Function – Hepatic AEF	Advanced	Onco Function – Hepatic AEF	CT Body Perfusion
MR				
syngo.MR Neuro Perfusion Engine				
	syngo.MR Neuro Perfusion	Advanced	Processing of brain perfusion datasets, relative mean transit time, relative cerebral blood volume and flow,calculation of local arterial input function.	MR T2* (Neuro) Perfusion
	syngo.MR Neuro	Advanced dependent	Calculation of perfusion-diffusion mismatch evaluation between 2	MR T2* (Neuro) Perfusion

	Perfusion Mismatch		or several ROIs, Neuro Reporting template	
syngo.MR Neuro Perfusion Engine Pro				
	syngo.MR Neuro Perfusion	Advanced	Same in 72D	MR T2* (Neuro) Perfusion
	syngo.MR Neuro Perfusion Mismatch	Advanced	Same in 73D	MR T2* (Neuro) Perfusion
	syngo.MR Neuro Dynamics1)	Advanced	Workflow optimized for brain tumor: Tumor specific sequence layout, 3D VOIs, follow-up, Mean Curve, CBV- maps From VB20: functionality available in workflow MR Neurology.	MR T2* (Neuro) Perfusion
syngo.MR Neuro 3D Engine				
	syngo.MR Neuro fMRI	Advanced	syngo.MR Neuro fMRI is a visualization package for BOLD fMRI:Visualization of fMRI Results Overlay of color-coded t-value maps on anatomical 2D/3D datasets.Multi contrast evaluation of up to 4 simultaneous contrasts,Anatomy visualization with 3D volume rendering.Superimposing of activation maps on cut and projection planes.Interactive specification of VOIs on sectional images.Calculation of the mean signal time course of all voxels in the VOI	MR IViewBOLD

	syngo.MR Tractography	Advanced dependent	3D Tractographic Assessment based on Diffusion Tensor Imaging. Image based coregistration at different time points,seed VOIs, filter operations to easily explore tracts, simultaneous visualisation of multiple multiple tracts, use voxel which are part of fMRI experiment, global tracking, tract visualisation in MPRs are additional functionalities.new feature with VB20: Offline DTI, DTI Evaluation	MR FiberTrak
syngo.MR Spectro Engine				
	syngo.MR Spectro SVS	Advanced	syngo.MR Spectro SVS provides evaluation of proton MR Single Voxel Spectroscopy (SVS) data with comprehensive workflow guidance.It contains the following features: Workflow syngo.MR Spectro SVS focuses on ease of use and reduces complexity. The post-processing tool fits and displays single voxel spectra and provides intuitive representations of the metabolic information derived from the spectra. The evaluation can be adapted to specific customer needs via protocol modification and task configurations, if required. Interactive reading of spectroscopy exams is supported by side-by-side display of images and spectroscopy results and synchronized display. Ad hoc tasks allow straightforward addition of the spectroscopy evaluation in other syngo.via workflows. Finally a semi-automatic quality check ensures that spectra and fit results meet predefined quality criteria. Data processing A new reliable fit-algorithm reduces the	MR SpectroView

			need for manual data processing and yields standardized and highly reproducible evaluation results. For example no user interaction is required for processing steps such as interactive phase correction and baseline correction. Customized input parameters in post-processing protocols allow an optimal evaluation of different use cases.	

	syngo.MR Spectro CSI	Advanced	syngo.MR Spectro CSI provides evaluation of proton MR Chemical Shift Imaging (CSI) data with comprehensive workflow guidance. It contains the following features: Workflow syngo.MR Spectro CSI focuses on ease of use and reduces complexity.The post-processing tool fits and displays spectra and provides intuitive representations of the metabolic information derived from the spectra. Calculation and display of predefined results such as spectra, spectral maps and metabolite images is provided on the fly. The evaluation can be adapted to specific customer needs via protocolmodification and task configurations, if required. Interactive reading of spectroscopy exams is supported by side-by-side display of images and spectroscopy results and synchronized display. Ad hoc tasks allow straightforward addition of the spectroscopy evaluation in other syngo.via workflows. Finally a semi-automatic quality check ensures that spectra and fit results meet predefined quality criteria. Data processing A new reliable fit-algorithm reduces the need for manual data processing and yields standardized and highly reproducible evaluation results. For example no user interaction is required for processing steps such as interactive phase correction and baseline correction. Customized input parameters in post-processing protocols allow an optimal evaluation of different use cases.	MR SpectroView

	syngo.MR Spectro Extension	Advanced	syngo.MR Spectro Extension provides comprehensive evaluation of proton MR spectroscopy data with workflow guidance. Both Single Voxel Spectroscopy (SVS) and Chemical Shift Imaging (CSI) data are supported and either package or both packages are prerequisite.It contains the following features:access and modify specific post-processing parameters,create metabolite images and result table of freely selectable result values,display unprocessed time domain signal display different signal types like complex, imaginary,magnitude and phase curves	MR SpectroView
syngo.MR Cardio Engine				
	syngo.MR Cardiac 4D Ventricular Function Function	Advanced	Automated/manual segmentation, volumetric and wall thickening analysis, ejection fraction, end-(di)systolic volumes, ventricular mass, stroke volume. New feature with VB20: basic scar quantification	MR Cardiac

	syngo.MR Cardiac Flow	Advanced	syngo.MR Cardiac Flow processes velocity-encoded MR images to evaluate blood flow dynamics.It contains the following features: Image Display Two large screen segments for viewing magnitude and phase Images Synchronized movie display Application of color look-up tables similar to Doppler,US Automated Segmentation Tools Semi-automatic edge detection for vessel lumen from initial user input Automatic compensation of in-plane motion as well as vesselsize or shape changes Quantitative Analysis,Through-plane and in-plane flow analysis,Background phase correction,Display of value and location of peak velocity on each image,Calculation of: Mean and peak velocity; mean, cumulative,forward and retrograde flow; regurgitation fraction,Changes in vessel size,Digital and Paper Reports,Various graphs: Velocity vs. time, flow rate vs. time, integral,flow vs. time, area vs. time,Summary tablesDedicated reporting of flow evaluation results.	MR Qflow
syngo.MR Prostate Engine				
	syngo.MR Tissue 4D	Advanced dependent	Automated, user adaptable qualitative perfusion preprocessing in 5 minutes Workflow accepts any naming convention for the perfusion protocol Semiquantitative perfusion modeling Ad-hoc capability & integrable into other workflows (e.g.prostate)	MR DyanaCAD
	syngo.MR Spectro CSI	Advanced	83D	MR Spectro View

Individual applications				
	syngo.mMR General	**Advanced**	**Provides the capability for reading of Biograph mMR Data.Common viewing Hangings for MR-PET Side by side viewing within one hanging Reading prerequisites (e.g. SUV, Fusion, rotating MIP) Common reading Findings Linking between MR and MI Volumetric evaluation Registration between time points Common reporting Report composer can deal with MR and MI specific findings**	**Multi Modality Viewer**
	syngo.MR Composing	**Advanced Dependent**	**syngo.MR Composing is a dedicated offline application for creation of full-format images from overlapping MR volume data sets acquired at multiple stages. It contains the following features:Display and storage of full-format images, e.g. of the spine or the vessel tree, composed from multiple overlapping stages. Dedicated composing algorithms, optimized for the generation of anatomical or angiographic full-format images. Data sets with different FoV, resolution, matrix and slice thickness can be composed and combined.Generation of full-format images from inline MIWP.Original, detail and reconstructed images can be displayed in different layouts.Measurements on reconstructed images.Extended orthopedic functions: Measurement of the Cobb (scoliotisis) angle, of the kyphotic angle, of vertical height differences and of horizontal interspaces.Key images/findings of the composing workflow can be transferred to syngo.via**	**MR Mobi View**

			reporting.new feature with VB20: Combine	
	syngo.MR Cardiac Perfusion	Advanced	workflow and algorithms for fully system guided, pixelbased parametric up-slope map calculation from CMR perfusion Fully system guided motion correction Segment-based reporting	MR Cardiac Temp. Ehnancement
	syngo.MR BreVis		workflow oriented reading/evaluation	MR T1 Perfusion
	syngo.MR Vascular Analysis		Novel MR specific vessel segmentation algorithm,Semiautomatic stenosis identification and antification,Workflow harmonized with CT (common look & feel)	MM AVA
NM				

syngo.mCT Oncology Engine				
	syngo.PET Segmentation	**Advanced**	**Volumetric analysis via iso-contouring, segmentation editing (correction) and automatic segmentation. Functional quantification, SUV evaluation, Peak calculation and PERCIST evaluation. PET virtual planar reconstruction to assist NaF evaluation. EQ.PET for SUV harmonization with a reference, and volumetric analysis with TLG.**	
	syngo.PET&CT Cross-Timepoint Evaluation	**Advanced**	**Automatic calculation of follow-up % change values (volume and max. SUV) and tumor burden growth rate.Visualization of up to four timepoints concurrently. Trend finding values across all timepoints.**	
syngo.mCT Oncology Engine Pro				
	syngo.PET Dynamic Analysis	**Advanced Dependent**	**Dynamic PET layout, time activity curve display and export.**	
	syngo.PET&CT Onco Multi-Timepoint	**Advanced**	**Same as 123D**	
	syngo.CT Segmentation	**Advanced**	**Same as 122D**	
	syngo.PET&CT Therapy Interface	**Advanced Dependent**	**Conversion of findings into RT Structures**	
syngo.mCT Cardiology Engine 4DM				

	syngo.PET Corridor4DM	Advanced	The CFR option of Corridor4DM 2016 estimates myocardial blood flow and coronary flow reserve (CFR) globally and regionally for the left ventricle. This option is validated for both 82Rb and 13N PET protocols utilizing dynamic data acquired from the onset of injection. Currently validated protocols are based on PET imaging systems that can measure the RV and LV blood curves with minimal dead time effects. Current list of supported PET imaging systems includes Siemens Biograph and ECAT PET systems, and GE Discovery PET Systems	NM Corridor4DM
	syngo.CT Extension Corridor4DM			NM Corridor4DM
	syngo.CT CaScoring	Advanced	Total and standard Calcium Scoring and coronary age calculation.	Ca Scoring
syngo.mCT Cardiology Engine 4DM Pro				
	syngo.PET Myocardial Blood Flow	Advanced	Cardiac Quantification Application for dynamic PET only:syngo MBF (integrated as 3rd party appl)	Corridor4DM SPECT V9
	syngo.CT Coronary Analysis		same 15D	CT Comprehensive Cardiac
	syngo.CT Cardiac Function		same 16D	CT Comprehensive Cardiac
	syngo.MI Hybrid Coronary View	Advanced Dependent	Hybrid display of a CT VRT fused with PET or SPECT quantification results.	
	syngo.MI Cardiac Reorientation	Advanced Dependent	Nuclear Cardiology applications	Corridor4DM SPECT V9
syngo.SPECT Cardio Engine 4DM				

	syngo.SPECT Corridor4DM	Advanced	107D	Corridor4DM SPECT V9
syngo.SPECT Cardio Engine 4DM Pro				
	syngo.CT Extension Corridor4DM	Advanced	Extension to either syngo .SPECT Corridor4DM or syngo .PET Corridor4DM with CT fusion and calcium scoring functionality.	Corridor4DM CT Opt V9
	syngo.CT CaScoring	Advanced	109D	Ca Scoring
	syngo.MI Cardiac Reorientation	Advanced Dependent	Nuclear Cardiology applications	Corridor4DM SPECT V9

Competition Strength and Weaknesses/Counter Strike

Strength:

1. Smart Positioning:
   a. syngo.via multi-modality routine reading functionality comes with every syngo.via system and is available to all users (i.e. is not licensed per user or seat).
   b. In case of 1-2CCU opportunity Syngo.Via price is much cheaper then ICAP 1-2 CCU.
   c. Aggressive pricing owing to 'bundled' deals + market-specific custom solutions
2. Strong focus on emerging markets & value-segment is strong. SYNGO.VIA continues to be aggressive in its reach out to wider markets and far flung areas – riding strongly on their modalities business and offering deep discounts for bundled, enterprise-level deals.

Countering SYNGO.VIA Healthcare:

1. Since SYNGO.VIA's modality install base is high – we should highlight our multivendor capability and vendor neutrality to push our ISP solutions.
2. Countering Syngo via Licensing model (we have to explain to the customer the difference between their Basic & Advance Licensing. E.g. if customer is looking for 5 CCU Syngo via will provide 3 basic and 2 advance application licenses.) that made them to keep the price lower.
   Note: please refer the attached supporting document of Syngo. Via licensing model.
3. We should push our existing promotions around upgrade and bundled deals.
4. To counter their massive hardware we should communicate that our applications are so efficient that can work flow less with moderate hardware.
5. Our new DynaCAD & Oncology applications give us more edge them Syngo Via MR solutions.
6. Our service price should be very localized to make it more aggressive.

Note: In case of questions / comments or concerns please write at: hit.sec.icap@philips.com