# Update on ATC Compliant Treatment Planning Systems and IHE-RO Effort

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### ATC Compliant Treatment Planning Systems (as of 3/22/05)

- ITC has received compliant data from BrainLAB BrainSCAN and TomoTherapy Hi-Art clinical users.
- BrainLAB (1/12/06) and TomoTherapy (3/29/05) have declined posting of their products, due to the limited distribution of export-capable systems.

Treatment Planning Systems			Exchange	Treatment Modality				
Vendor	System	Version*	Format	3DCRT	IMRT	Seed Brachy	HDR Brachy	Protons
<u>CMS</u>	Focus/XiO	3.1	R	$\checkmark$	$\checkmark$	$\checkmark$		
<u>Elekta</u>	RenderPlan 3D		R	✓				
	PrecisePlan	2.01	D	$\checkmark$	$\checkmark$			
Nomos	Corvus		R		++			
<u>Nucletron</u>	Helax TMS		R	$\checkmark$	$\checkmark$			
	TheraPlan Plus		R	✓				
	PLATO RTS	2.62	D	$\checkmark$				
	PLATO BPS	14.2.6	D				$\checkmark$	
<u>Philips</u>	Pinnacle <sup>3</sup>		R	$\checkmark$	1			
	AcqPlan	4.9	R	$\checkmark$				
Rosses Medical	Strata Suite CTPlan	4.0	R			✓		
<u>RTek</u>	PIPER	2.1.2	R			$\checkmark$		
<u>Varian</u>	BrachyVision	6.5 (Build 7.1.67)	D				✓	
	Eclipse	7.1	D	$\checkmark$	$\checkmark$			
	VariSeed	7.1	D			✓		

**D** = DICOM RT Objects

R = RTOG Data Exchange Format

#### ITC Work With Vendors Toward ATC Compliance

- BrainLab BrainScan v. 5.31?? (RTOG)
  - Vendor complete (without "patient localization"), but not generally available
  - Reviewable data received from clinical users
- TomoTherapy Hi-Art (DICOM)
  - Vendor complete, but not yet generally distributed
  - Reviewable data received from clinical users
- Philips Pinnacle<sup>3</sup> v. 7.9f/2.5b (DICOM)
  - Vendor complete (external beam only) 1/4/06
- CMS XiO (DICOM)
  - Vendor complete
  - DRR (RT Image) submission added 1/5/06
- AccuRay CyRIS Multiplan v. 1.1 (DICOM)
  - Vendor complete, to be released soon 1/10/06
- 3D Line Ergo (DICOM)
  - Vendor complete, but distribution status unknown
  - Reviewable phantom data received from clinical user

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## IHE-RO Update

- First "Use Case" supports "normal flow" of clinical data from CT scan through dose display for 3D conformal, external beam RT.
  - Primary goal is to reduce ambiguity and improve basic interoperability in the use of DICOM RT objects.
  - Includes DICOM objects used for ATC protocol submissions
- Not included in the first year (2006) Use Case are
  - HIS/RIS connectivity
  - Workflow management
  - IMRT
  - Brachytherapy

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# IHE-RO: Recent Technical Committee Meetings

- IHE-RO TC Meeting, Aug. 22-26, 2005 at IMPAC, Mountain View, CA
- IHE-RO TC Teleconference Sept. 21, 2005
- IHE-RO Joint PC/TC Meeting, Oct. 19, 2005, at ASTRO, Denver, CO
- IHE-RO TC Teleconference Nov. 16, 2005
- IHE-RO TC Teleconference Dec. 21, 2005

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#### **IHE-RO: Timeline**

- Technical Framework document
  - Final drafts of "Transactions" reviewed at 12/21/05 teleconference
  - Final form to be ready for Jan 2006 TC meeting.
- Technical Committee meeting Jan 25-27, 2006
- Connectathon Aug 2006
  - Prove systems can interoperate with 3+ others
  - Successful systems may participate in public demo
- Public Demonstration (ASTRO) Nov 2006
  - Educational area
  - Workstations to demonstrate interoperability

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