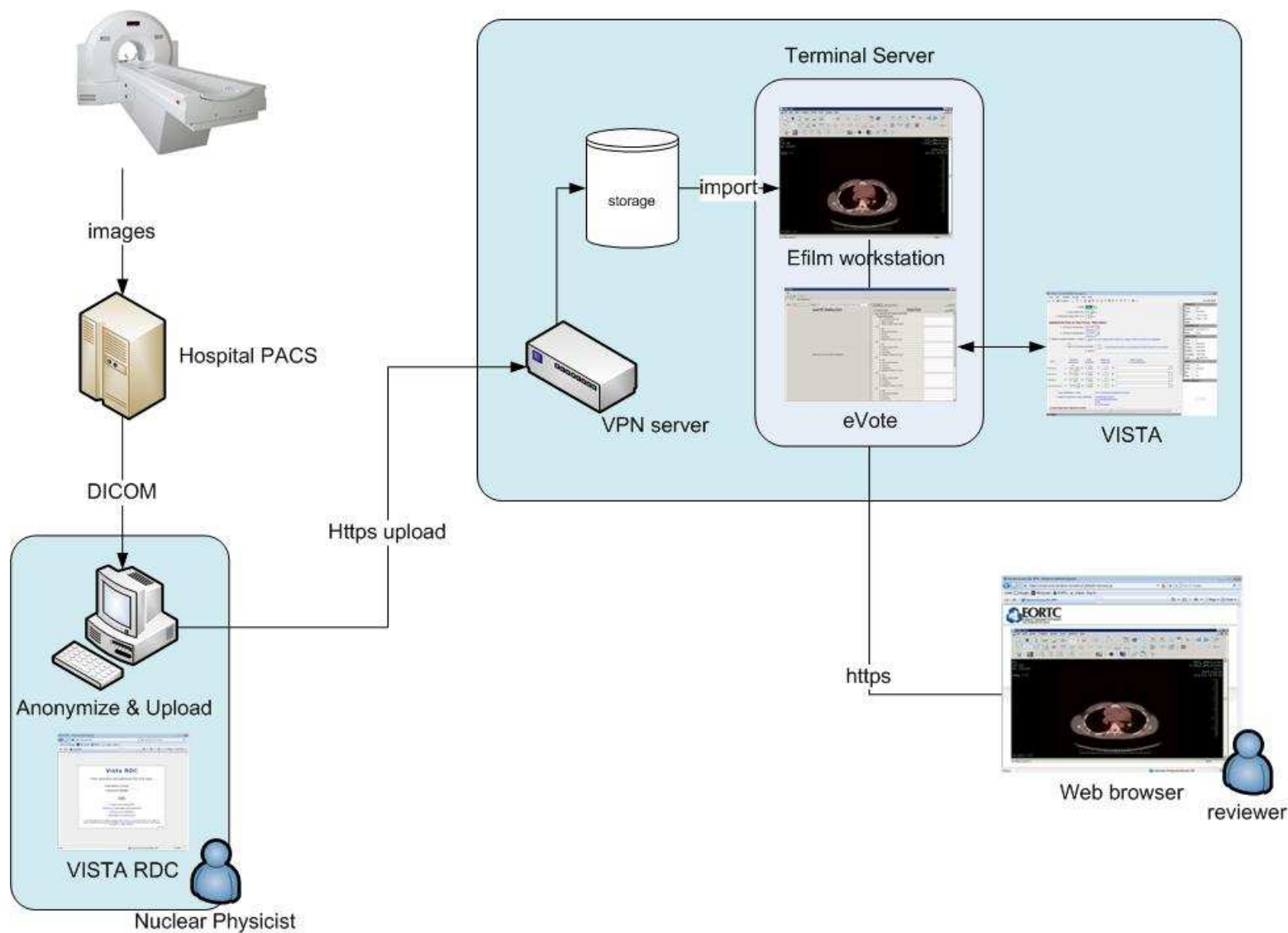


# **EORTC imaging platform**

**Jocelyne Flament– Head of Medical Department,  
EORTC**

# H10 EORTC setup

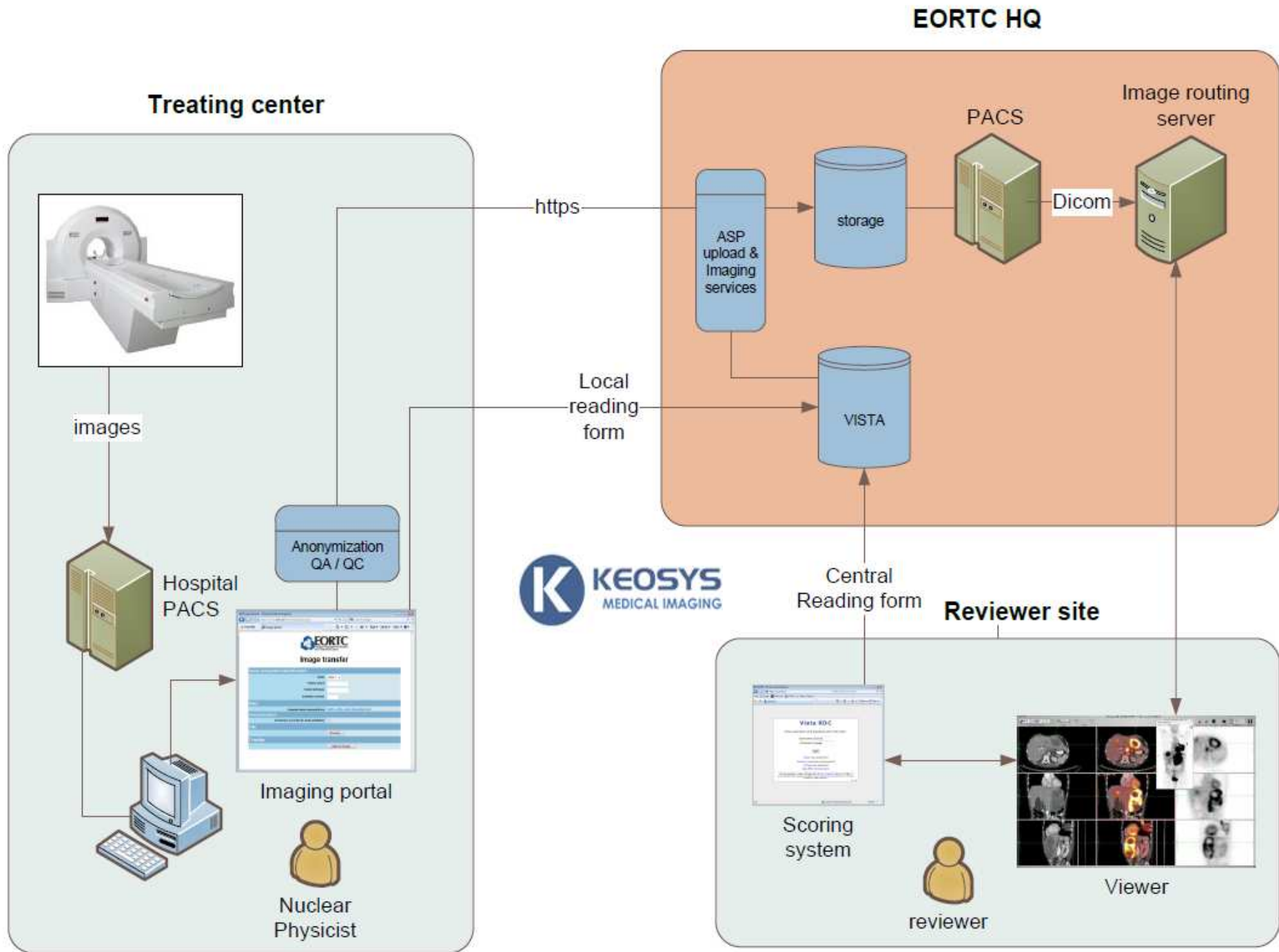


- Centers
    - Anonymize it
    - Send it to EORTC HQ
    - Send data about image HQ
  - HQ
    - Check
    - Import
    - Notify reviewers
  - Reviewers
    - View
    - Score
  - Reporters
    - Conclude the case
    - Communicate results
- Centers
    - ?
    - Juniper HTTPS Upload
    - VISTA Remote Data Capture
  - HQ
    - eFilm
    - eFilm
    - email
  - Reviewers
    - eFilm remotely
    - eVote remotely
  - Reporters
    - eVote remotely
    - email

## Advantages of this setup

- **Clientless setup**
- **Standard protocol (HTTPS)**
- **Cheap: uses hardware and systems in place**
  - VPN server
  - Storage
  - Remote Data Capture

- **Lack of integration**
  - **upload image + anonym.**
  - **send data**
  - **view image**
  - **score image**
- **Lack of automation**
  - **Import**
  - **Anonymize**
  - **Emails confirmation**
- **Fake web-based**
  - **Windows application running on Terminal Server (slow)**
- **Limited capacity**
- **Lack of integration**
  - **Web portal**
  - **One single point of entry**
  - **Standalone HTTPS upload**
- **Lack of automation**
  - **Idem (web portal)**
  - **Java based common anonymization tool**
  - **Idem (web portal)**
- **Fake web-based**
  - **Web viewers or**
  - **Local review (?)**
- **Expand NAS & Backup capacities**



- **Uploading**
  - **Web portal**
  - **Single point of entry**
  - **Upload – anonymize – describe**



# Upload page example

Image upload - Windows Internet Explorer  
http://www.eortc.be/test/imageupload.asp

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European Organisation for Research  
and Treatment of Cancer

## Image transfer

**Study and patient identification**

Study	20051 ▾
Patient seq id	<input type="text"/>
Patient birthdate	<input type="text"/>
Institution number	<input type="text"/>

**Data**

Complete data transmittal form [20051 - RDC - Data Transmittal Form](#)

**Anonymization**

Anonymize according to study guidelines

**File**

**Transfer**

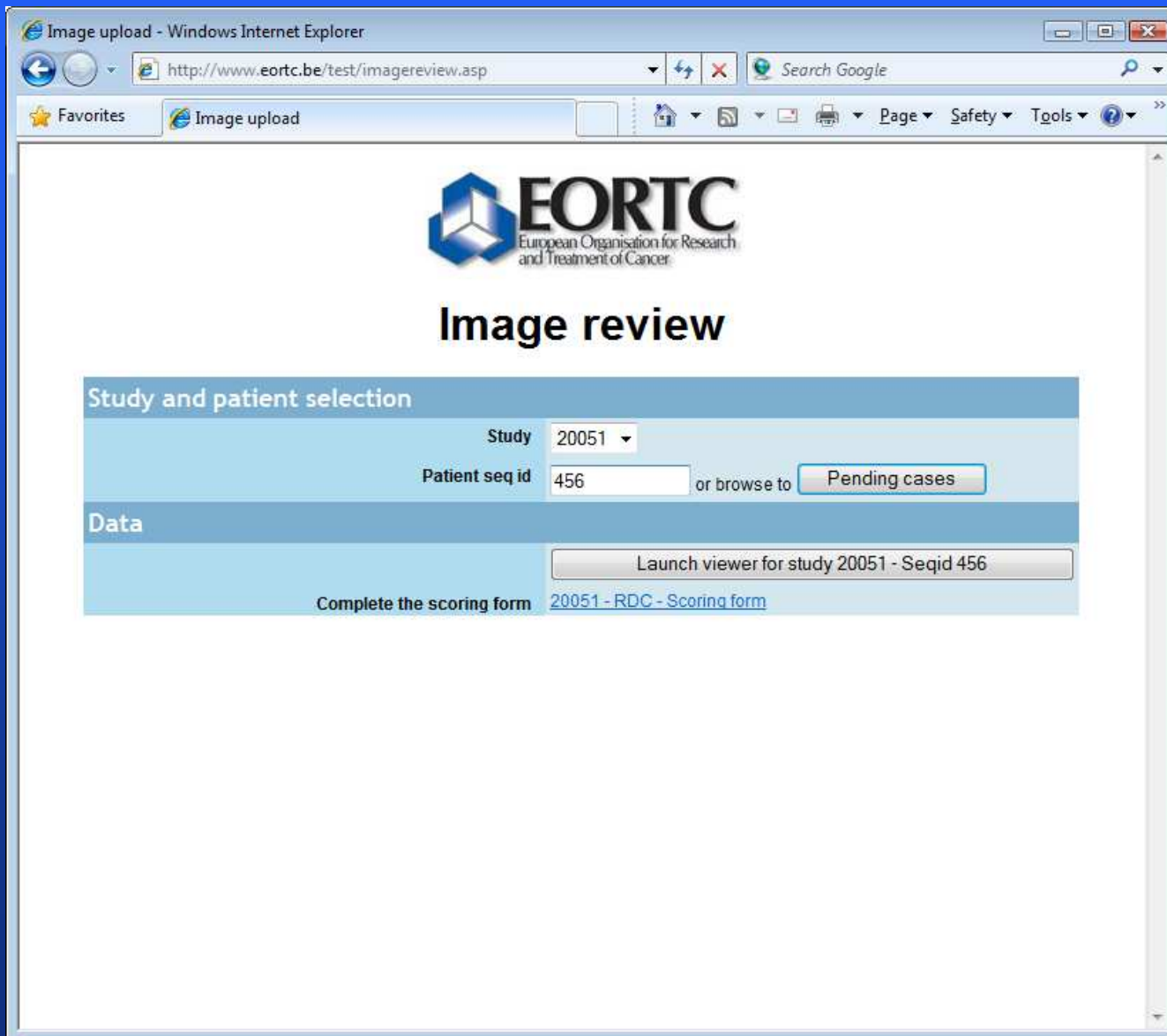


- **Storing**
  - Large storage capacity
  - Increase performances
  - Large backup capacity
  - Image indexation



- **Reviewing**
  - **Web portal**
  - **Single point of entry**
  - **High-end viewers and analysis tools**
    - ◆ **dedicated for each domain**
  - **smooth migration to web viewing and analysis**






The screenshot shows a Windows Internet Explorer browser window with the address bar displaying `http://www.eortc.be/test/imagereview.asp`. The page content includes the EORTC logo and the heading "Image review". Below this, there is a "Study and patient selection" section with a "Study" dropdown menu set to "20051" and a "Patient seq id" input field containing "456". A button labeled "Pending cases" is next to the "or browse to" text. A "Data" section contains a button labeled "Launch viewer for study 20051 - Seqid 456". At the bottom, there is a link: "Complete the scoring form [20051 - RDC - Scoring form](#)".

Image upload - Windows Internet Explorer

`http://www.eortc.be/test/imagereview.asp` Search Google

Favorites Image upload

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## Image review

**Study and patient selection**

Study 20051

Patient seq id 456 or browse to Pending cases

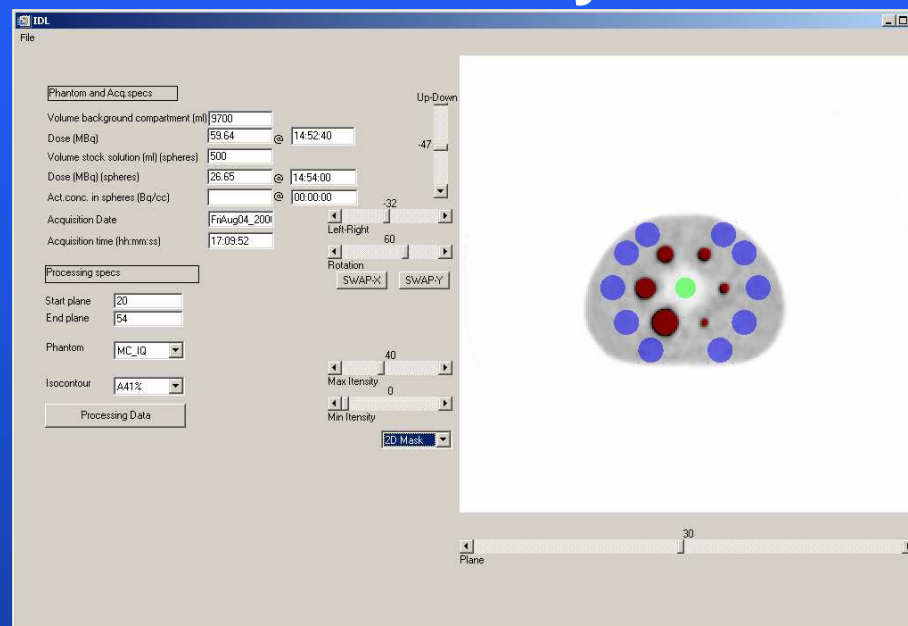
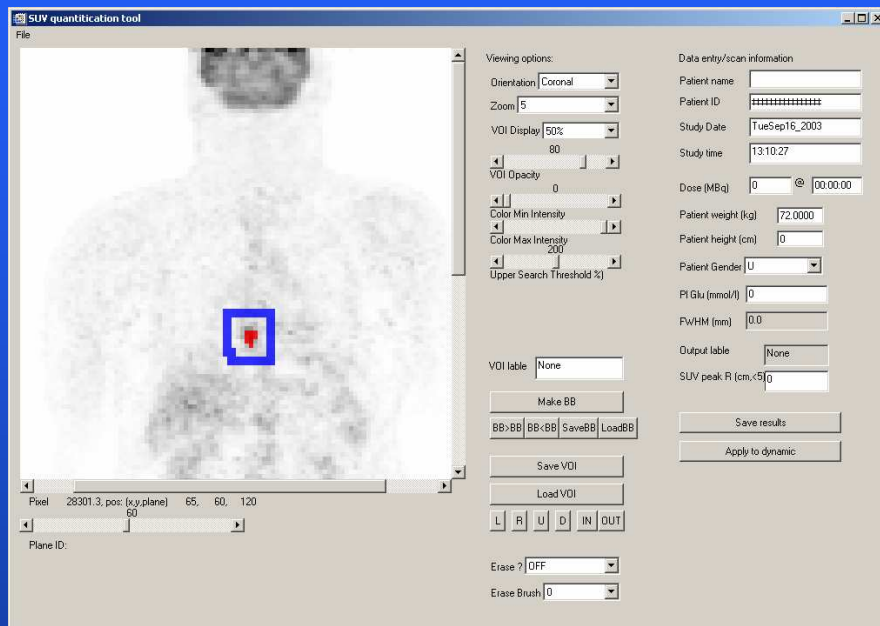
**Data**

Launch viewer for study 20051 - Seqid 456

Complete the scoring form [20051 - RDC - Scoring form](#)

# Integration of multicenter QA tool

## Automated VOI & SUV tools Tools for analysis of QC



3D VOI based on region growing or shrinking,

manual spatial limits can be set

SUV calculations

ASCII report file providing o.a.:

- act.conc.

- SUV-BW, LBM, BSA

- with and w/o plasma glucose correction

Calibration QC:

- Automatic VOI placement

- Verification of calibration

- Verification of inter-&intra-plane uniformity

IQ QC

- Recovery coefficients (volume & act.conc.)

- Cold spot recovery using central insert (scatter)

- Verification of calibration using background VOI

- **Validated by first experience**
  - Standard protocol (https)
  - Clientless installation / run from everywhere
  - Terminal services
- **Enhancements**
  - Integration & automation = web portal
  - Capacity = NAS+
  - Performances = hadhoc hardware
  - Dedicated viewing tools = VODCA, ...

Review