

Massimo Raineri - Head of Systems Development Biometry



3rd Annual DIA Clinical Forum - Nice 2009



Taking Decisions on Events



3rd Annual DIA Clinical Forum - Nice 2009

Clinical Events

- Clinical trials can be driven by clinical events
- Many clinical events lack standard or commonly accepted definitions or are subject to interpretation



3rd Annual DIA Clinical Forum - Nice 2009

21 October 2009

Clinical Event: examples

- Hospitalization for PAH-non elective with predefined criteria (including IV prostanoid, Tx and BAS)
- New *** due to *** as either the primary or relevant contributing cause



3rd Annual DIA Clinical Forum - Nice 2009

The Adjudication Process

- An event reported at a site is reviewed by a set of experts (CEC)
- The assessment done the set of experts is used for statistical analyses

Clinical Event Committe

Central Event Committe

Critical Event Committe



3rd Annual DIA Clinical Forum - Nice 2009

21 October 2009

The Adjudication Process

CENTRALIZED

ON-LINE



3rd Annual DIA Clinical Forum - Nice 2009

Why Central Review?

- Accuracy in Event detection: high level of expertise needed
- Independency: avoid bias in finding out events
- Homogeneity: centralized committee



3rd Annual DIA Clinical Forum - Nice 2009

21 October 2009

Why an online system?

- Time to confirm an event as a study endpoint is a key factor
- Amount of data involved in the decision process
- Data can change during the adjudication process before file closure
- Users may need interactive tools (generate Charts, view Radiology / CT images with zoom / measure / contrast features)



3rd Annual DIA Clinical Forum - Nice 2009

Online Adjudications System in Actelion

• 2001: Enable (>1600 Patients)

2005: Compass II (ongoing)

• 2008: Conscious II (ongoing)

2008: Seraphin (ongoing)

• 2009: Conscious III (under development)

• 2009: Restora (planned)



3rd Annual DIA Clinical Forum - Nice 2009

21 October 2009

What is the difference between the implementations?

- The roles involved
- The process
- The link with External Sources
- Interactive tools



3rd Annual DIA Clinical Forum - Nice 2009

Patients data handled by the system

- CRF "Key data" (e.g.: Primary cause of death, Neurological worsening onset date, ...)
- Case Report Summary (CRS) or Patient Profile listing all patient data (including external)
- External (non-CRF) documents (e.g.: ECG, Death Certificate, Hospital Discharge Summary, ...)



3rd Annual DIA Clinical Forum - Nice 2009

21 October 2009

A real example

CONSCIOUS - 2

Aneurismal Subarachnoid Hemorrhage



3rd Annual DIA Clinical Forum - Nice 2009

Roles (inside Sponsor)

- Coordinator: Actelion responsible for patient cases submission to the CEC, document organization and upload.
- BatchProcess: Automatic jobs loading data, preparing CRS, detecting changes.



3rd Annual DIA Clinical Forum - Nice 2009

21 October 2009

Roles (outside Sponsor)

- Primary Reviewer: The CEC member who makes the primary review of a subject case and completes a CEC Form.
- Consensus Reviewer: The CEC member who leads the consensus meeting and completes the Consensus Form.



3rd Annual DIA Clinical Forum - Nice 2009

Roles (outside Sponsor)

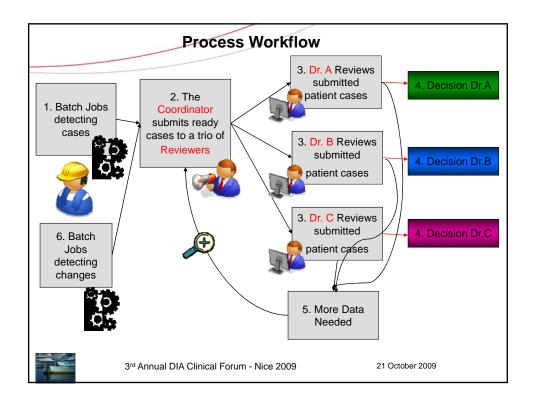
- Adjudicator: The one who decides when no unanimity could be reached during a consensus meeting and completes the Adjudication Form
- Chairman: Is responsible to indicate whether changes occurring after the subject case was submitted should trigger a re-review of the case.

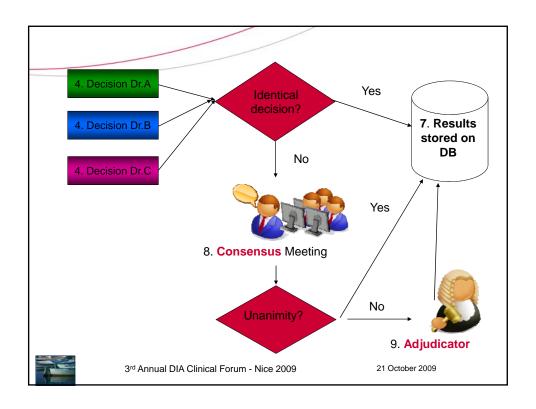


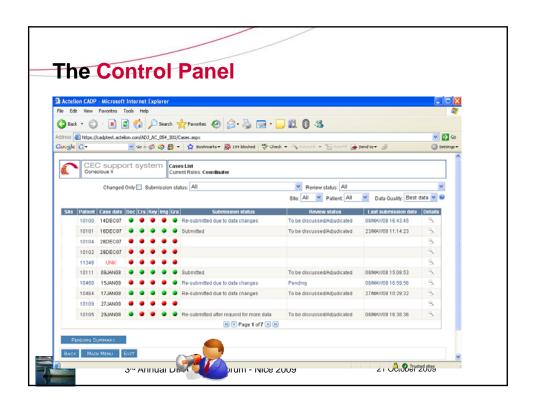


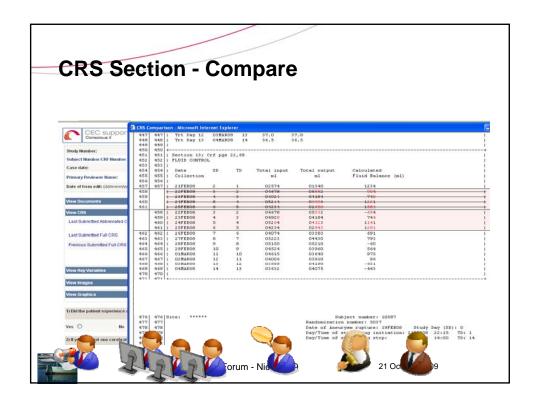


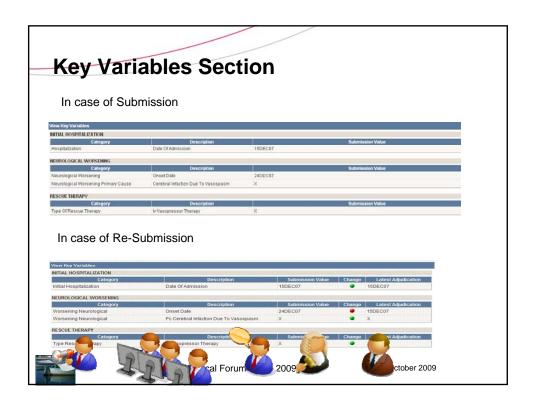
3rd Annual DIA Clinical Forum - Nice 2009

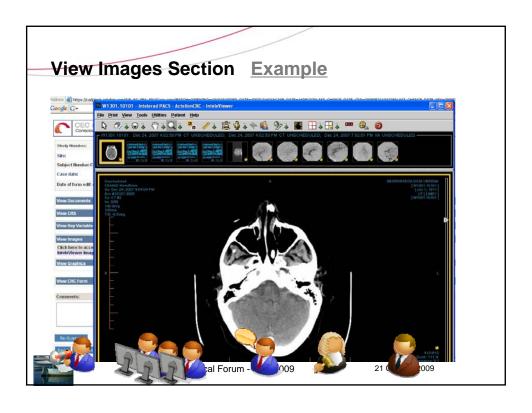


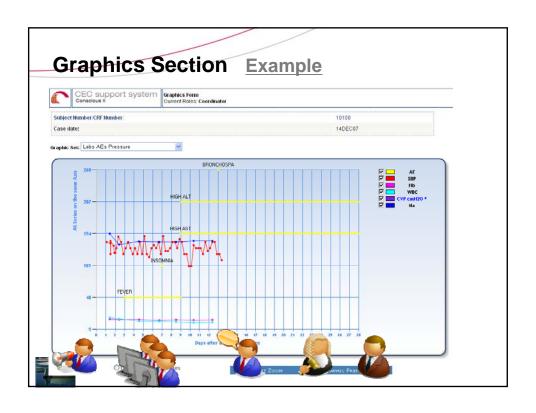












Two-Levels EDC

1st: Many Data Sources – One Way data flow









2nd: On line System fed with data from Level 1 – Two Ways data flow





3rd Annual DIA Clinical Forum - Nice 2009

21 October 2009

Conclusion

Online Adjudication System is critical tool to:

- Reduce the time to confirm an event as a study endpoint
- Handle the huge quantity of data involved in the decision process
- Handle the change of data during the process
- Ensure Accuracy, Independency, Homogeneity



 $3^{\text{rd}}\,\text{Annual DIA Clinical Forum}$ - Nice 2009

Questions



West Ham United's Carlton Cole fouls Arsenal's Alexandre Song Billong, resulting in a red card - Sonntag 26. Oktober 2008, 19:04 Uhr



3rd Annual DIA Clinical Forum - Nice 2009

21 October 2009

Massimo Raineri

massimo.raineri@actelion.com



3rd Annual DIA Clinical Forum - Nice 2009