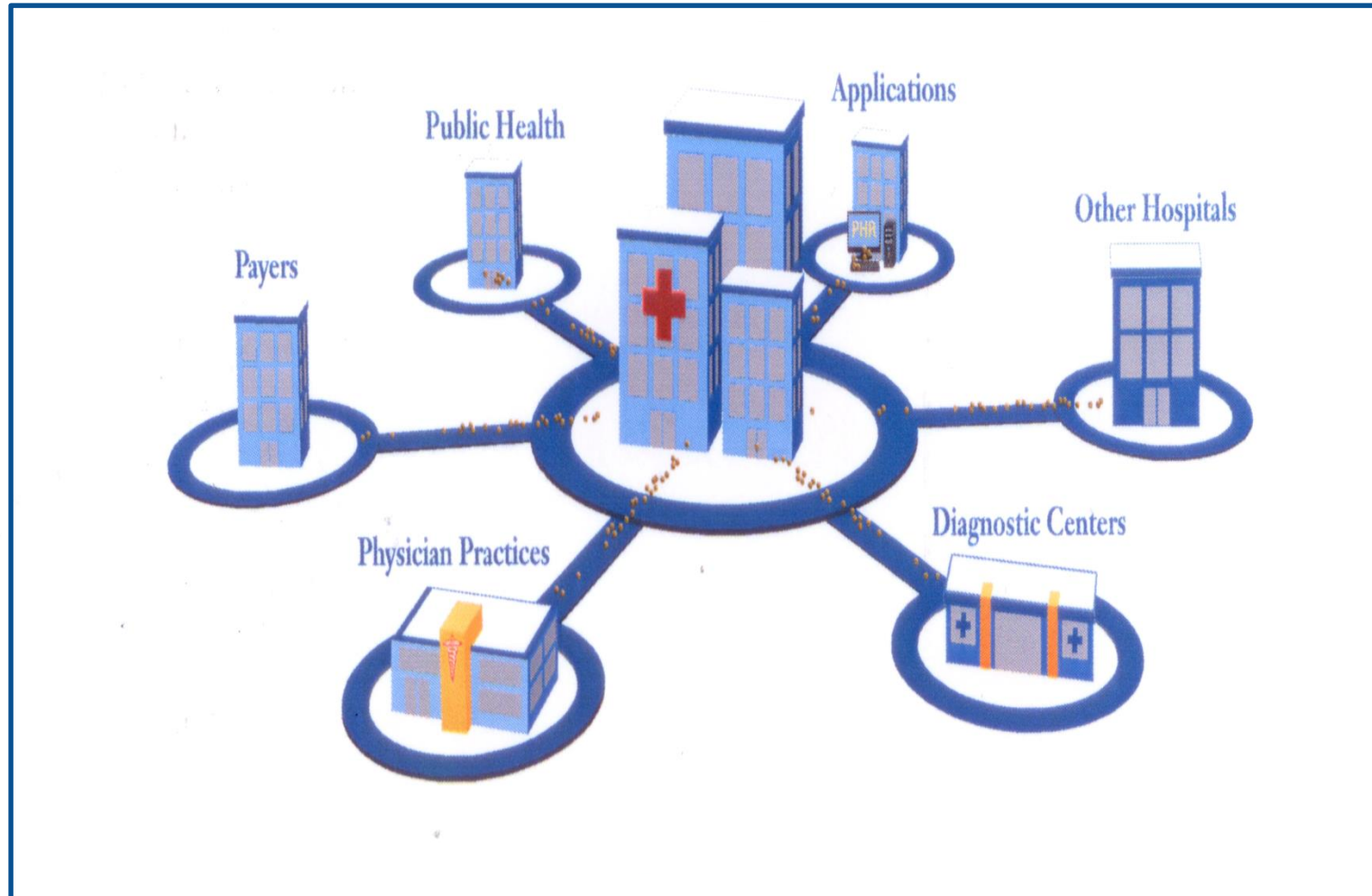


Improved healthcare services by efficient information exchange in the INSEED Project

ILEANA CONSTANTINESCU

“Carol Davila” Medical University, Bucharest

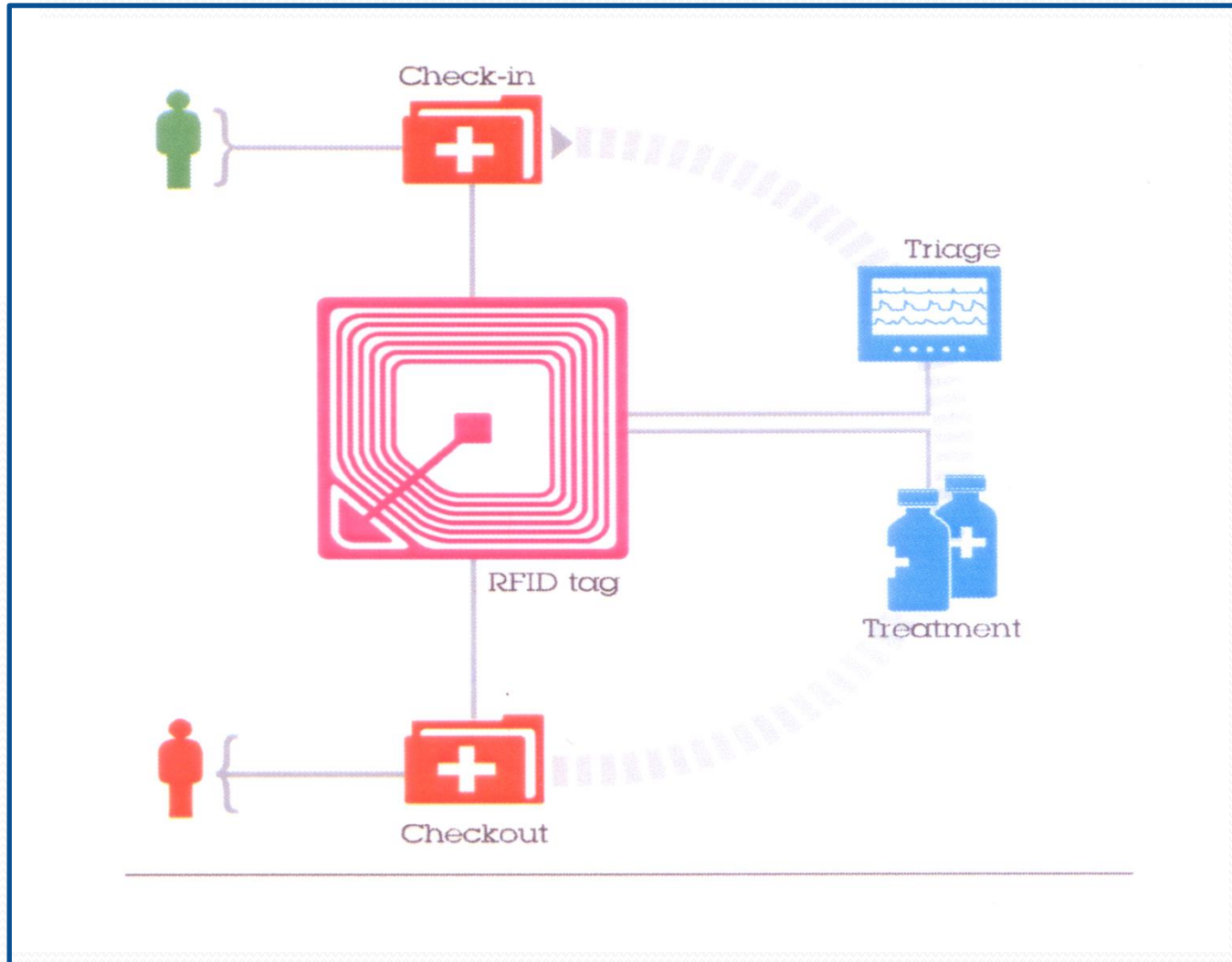
Health system



The Impact of Health Informatization in the Romanian N.H.S.

- Wards
- Out patient clinic
- Laboratories
- Pharmacy
- Operating theatres
- I.C.U
- 24 h duties
- Economic Department
- Human resources
- Statistics

Greater efficiency



Informatization in Health

Hospital → University clinic → Research

1. Monitoring the movement of the patients + costs:

- out patient
- admittance in the hospital
- medical analysis
- medical consulting
- surgical operations
- I.C.U
- treatments; recoveries

2. Investigations: Echo

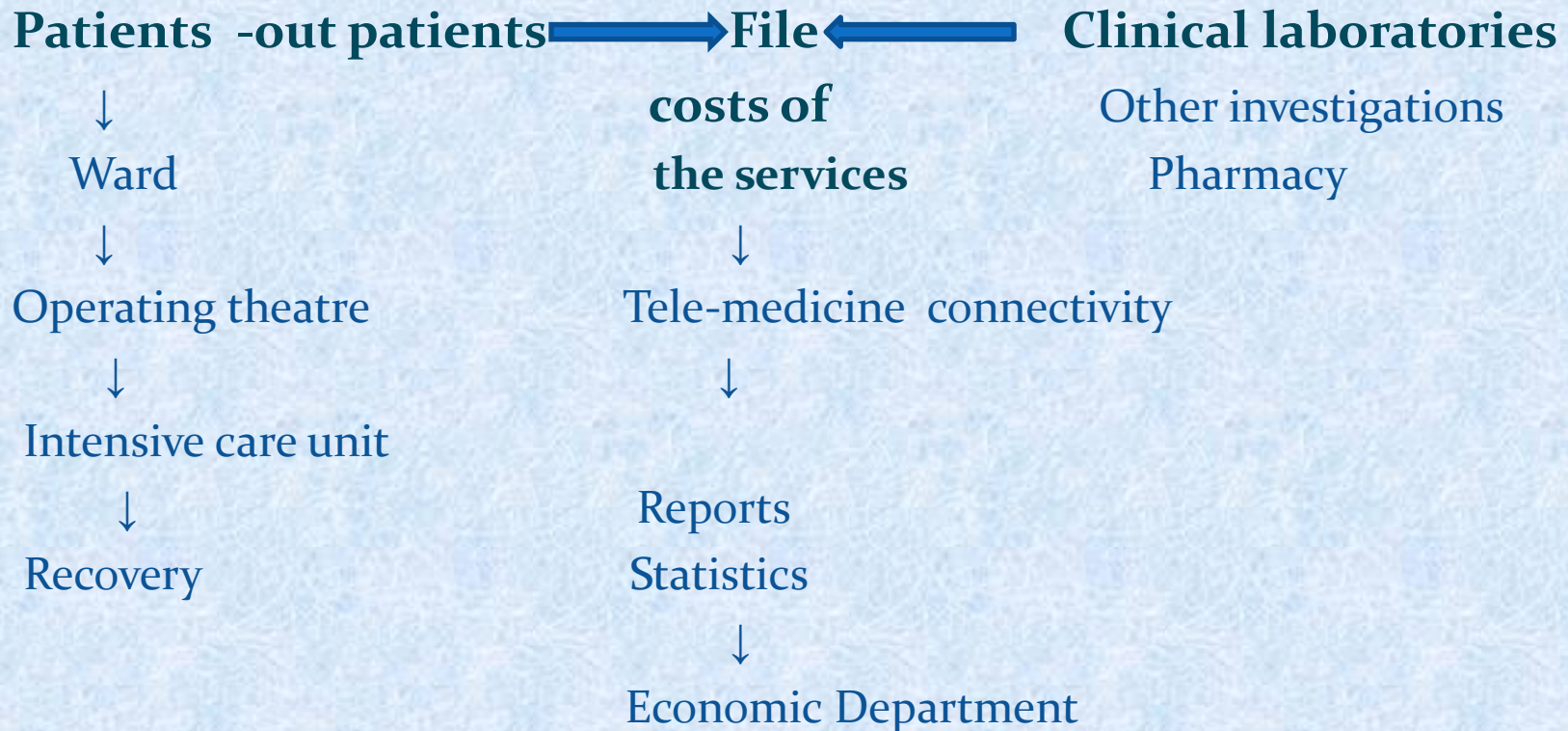
Rx
Endoscopies
EKG
EEG
CT
MRA
SRA
PET

3. Externalization of patients

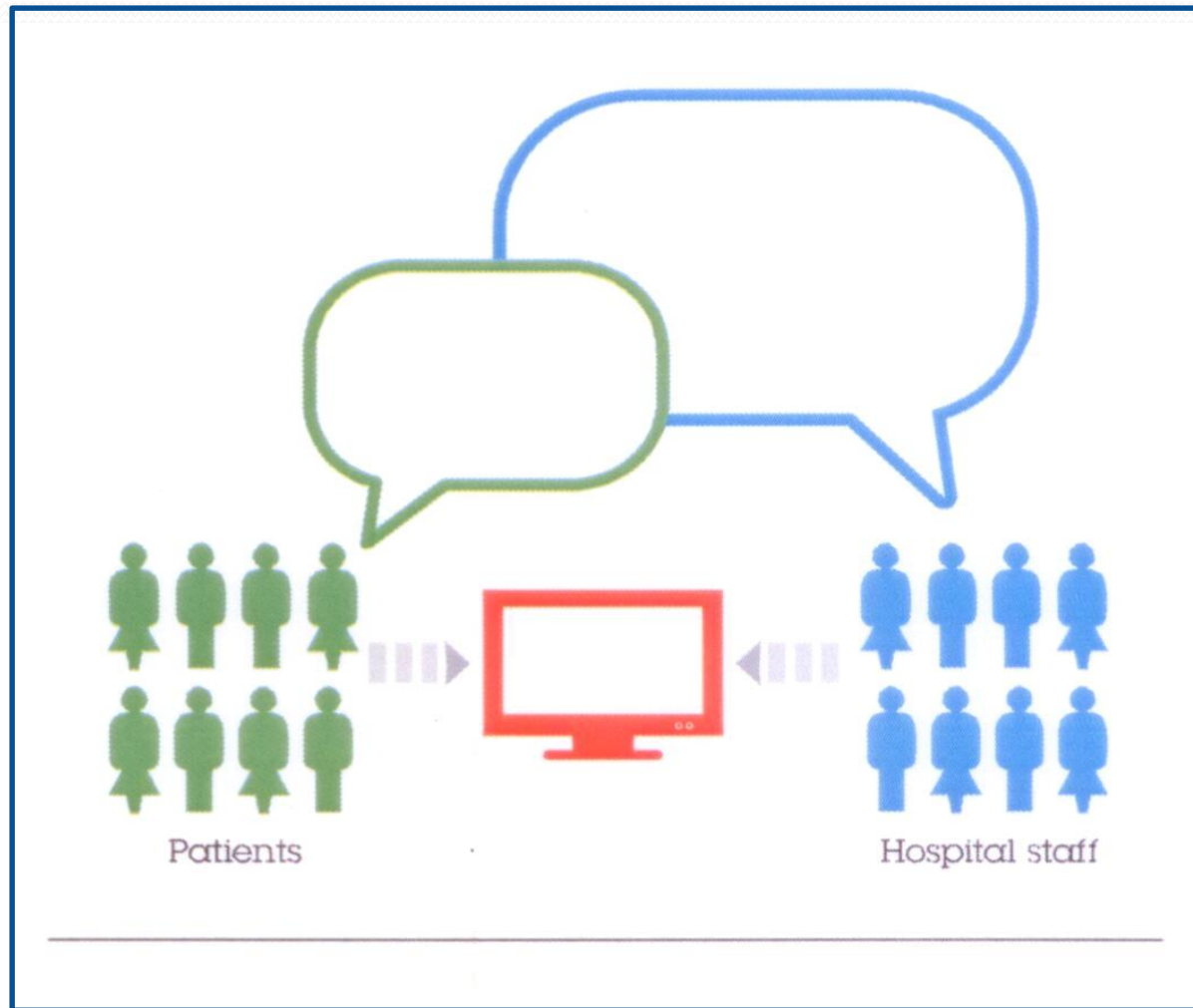
Informatization in Health

- **Real time evidence of costs/ patient/ ward/ hospital**
- **Evidence of stocks - pharmacy**
 - reagents
 - food
 - consumables
 - fix items
- **Salaries**
- **Reports**
- **Financial balances**

Informatization in Health



Smarter healthcare



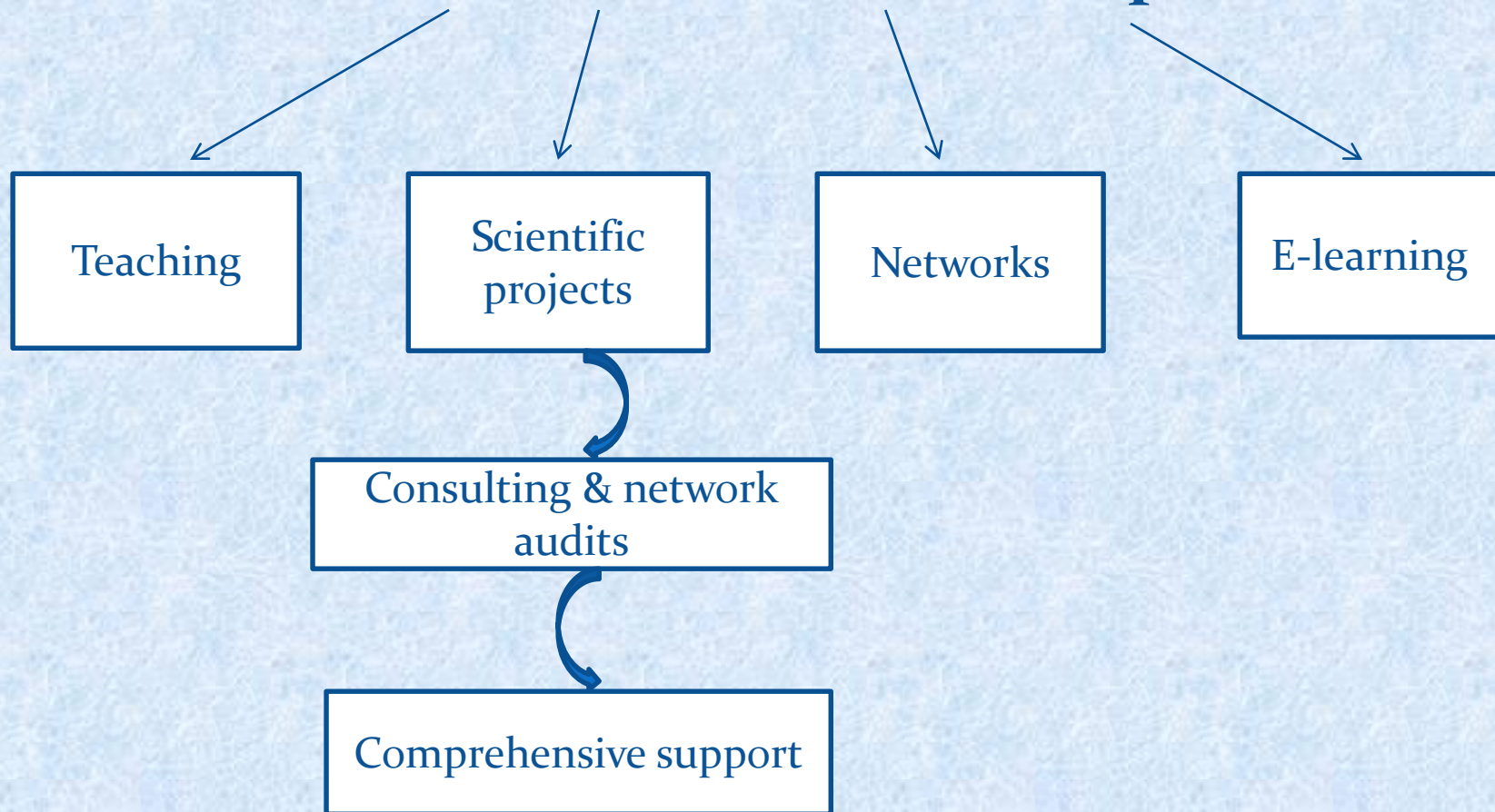
Smarter healthcare

- Do our doctors have access to the right patient and drug information at the right time?
- Do we collaborate, not just cooperate, with other doctors, our patients and the healthcare community?
- Are our operational processes able to adapt and respond quickly to meet patients demands?
- Is our medical information stuck in silos and underutilized across the organization?
- Are we focused on the patient?

Informatization in Health

University clinic – Research

Research and Grants Dept.

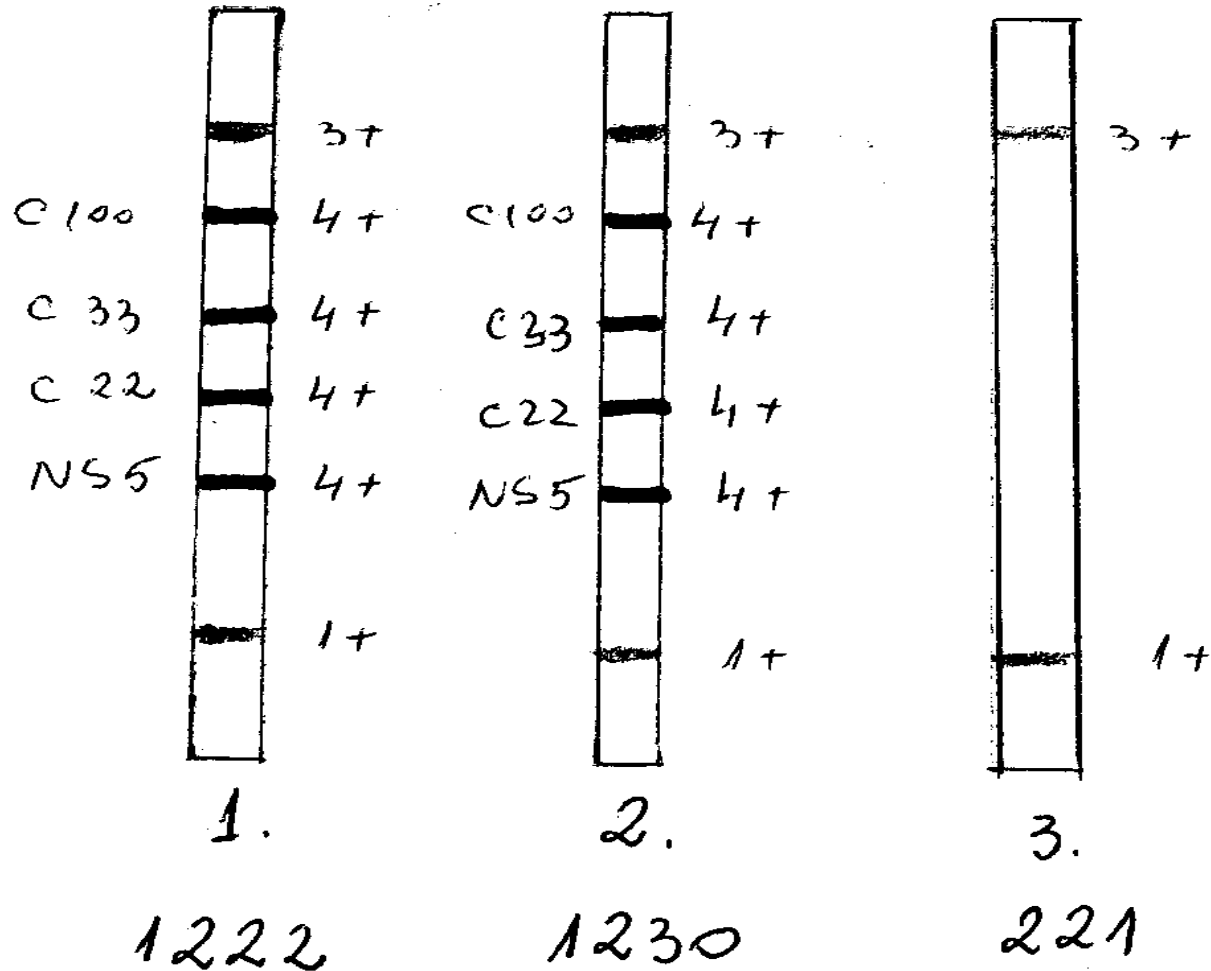


Information management (INSEED Development)

- Independent and Standards – Based Technology
- Interoperability Services
- Professional Services
- Optimizing care and performance



RIBA confirmatory test for HCV



- **HLA typing:** Bone Marrow Tr. Unit
Liver Tr. Unit
Renal Tr. Unit
Pancreatic islets Tr. Unit

National Bone Marrow Donor Registry

Waiting list for - Bone Marrow tr.
- Liver and Renal tr.

Allele SBT- new alleles- Allele SEQR typing kit Patients results

Assign - Patient 49

File Edit View Launch Reports Help

IMGT/DPB1 2004-04-05
Exon 2 24 Codon 13.1

.....130.....140.....150.....160.....170.....180

CAGGAATGCTACSCGTTTAAATGGGACACAGCGCTTCTGGAGAGAKACATCTACAAC

49 DRB1

49 A

49 DPB1

49_DPBI_F

49_DPBI_R Rev

Allele 1	Allele 2	Full	Part	MM 0	MM 1
DPB1*040101	DPB1*0402	264	0	0	NA
DPB1*2301	DPB1*5101	264	0	0	NA
DPB1*020102	DPB1*040101	264	0	1	NA
DPB1*020102	DPB1*3301	257	7	1	NA
DPB1*040101	DPB1*5101	264	0	1	NA
DPB1*040101	DPB1*5901	257	7	1	NA
DPB1*040101	DPB1*6001	257	7	1	NA
DPB1*040101	DPB1*7701	264	0	1	NA
DPB1*040101	DPB1*8001	251	13	1	NA
DPB1*040101	DPB1*8201	264	0	1	NA
DPB1*040101	DPB1*8301	264	0	1	NA
DPB1*040101	DPB1*9401	264	0	1	NA
DPB1*040102	DPB1*0402	264	0	1	NA
DPB1*0402	DPB1*2301	264	0	1	NA
DPB1*0402	DPB1*3301	257	7	1	NA
DPB1*0402	DPB1*3901	263	1	1	NA
DPB1*0402	DPB1*7201	255	9	1	NA
DPB1*0402	DPB1*9901	264	0	1	NA
DPB1*2301	DPB1*4901	255	9	1	NA
DPB1*2301	DPB1*8101	264	0	1	NA
DPB1*5101	DPB1*7101	255	9	1	NA
DPB1*5901	DPB1*7201	255	2	1	NA
DPB1*7101	DPB1*8101	255	9	1	NA
DPB1*7201	DPB1*8301	255	9	1	NA
DPB1*020102	DPB1*040102	264	0	2	NA
DPB1*020102	DPB1*2301	264	0	2	NA
DPB1*020102	DPB1*3901	263	1	2	NA
DPB1*020102	DPB1*7101	255	9	2	NA
DPB1*020102	DPB1*7201	255	9	2	NA
DPB1*020102	DPB1*9901	264	0	2	NA
DPB1*020103	DPB1*040101	264	0	2	NA
DPB1*020103	DPB1*3301	257	7	2	NA
DPB1*020104	DPB1*040101	263	1	2	NA
DPB1*020104	DPB1*3301	257	6	2	NA
DPB1*020105	DPB1*040101	264	0	2	NA
DPB1*020105	DPB1*3301	257	7	2	NA
DPB1*020105	DPB1*3301	264	0	2	NA

49

97 C 124

Master BCS

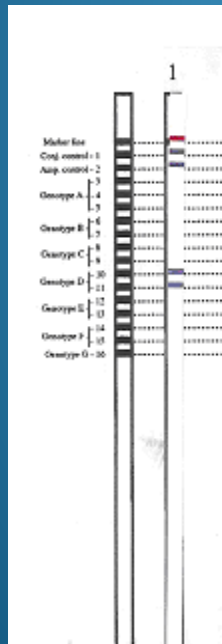
Confirm Mismatch

Start Assign - Patient 49 Microsoft PowerPoint - [...]

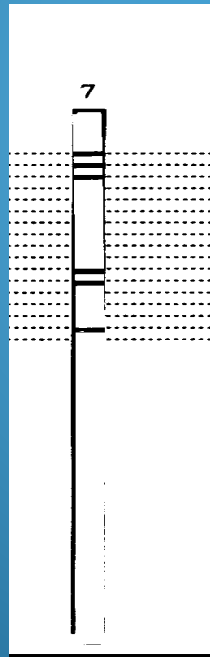
NUM 14:37

HBV genotyping in Romania

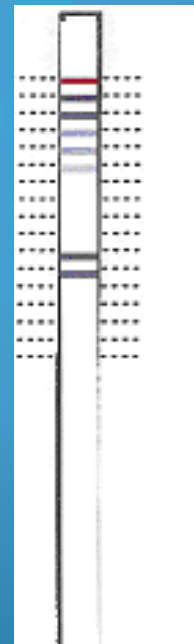
INNO - LiPA HBV, Innogenetics



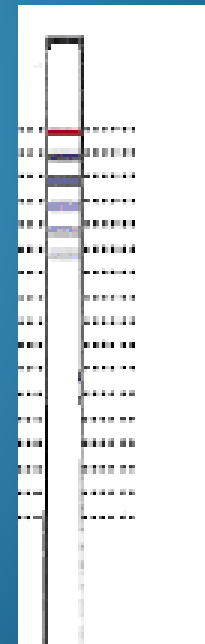
D Genotype



D+F Genotype



D+A Genotype



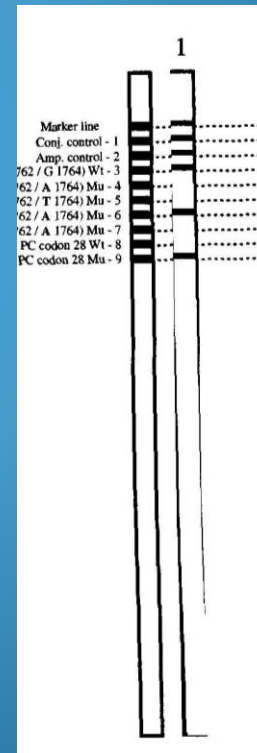
A Genotype

HBV precore – core mutants - INNO – LiPA

HBV precore, Innogenetics

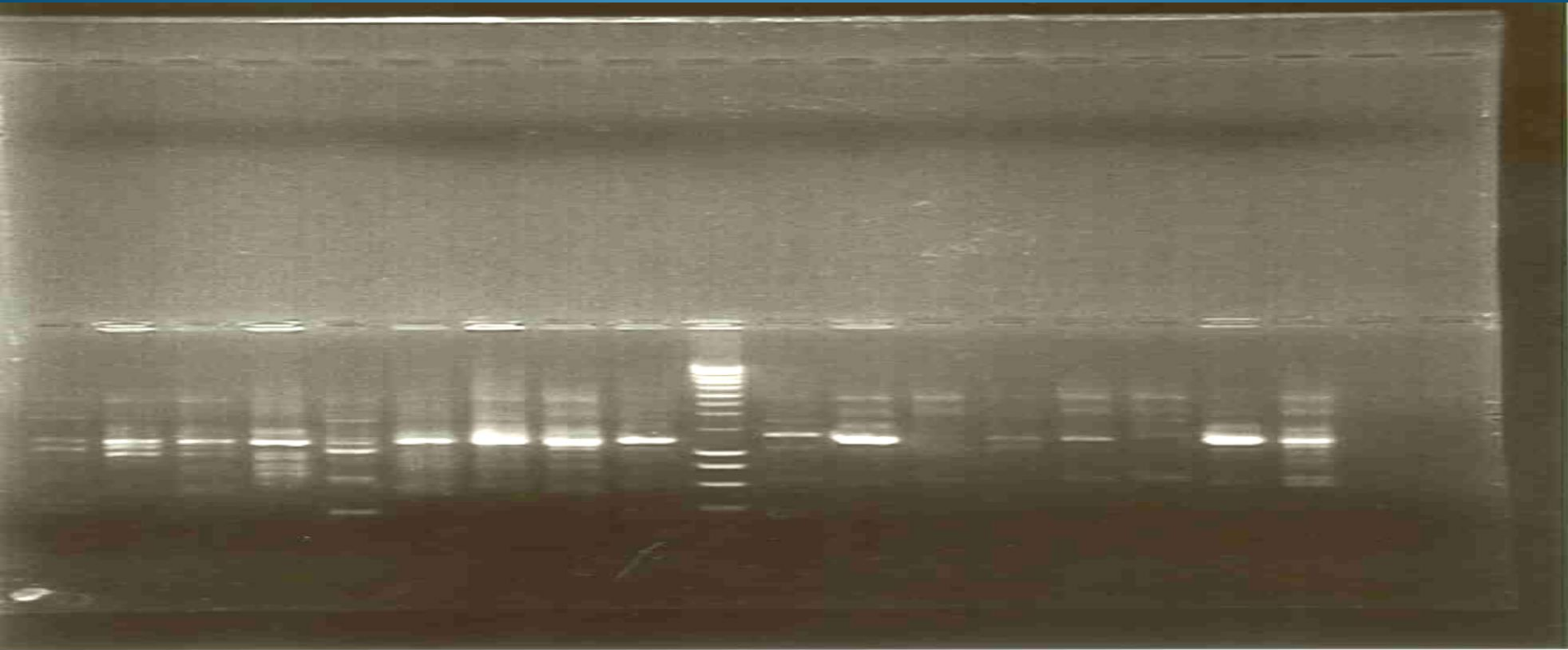


BCP A 1762/G1764
PC codon 28- no
mutants



BCP A 1762/G1764
BCP T 1762/A 1764

HBV in pathogenesis of HCC



```

Query: 1      tttgtcctcetaaattccaggatcaacaacaaccagtcacggggaccatgcaaaa--tgca-g 57
Sbjct: 317   tttgtcctcetaaattccaggatcaacaacaaccagt-acggggaccatgcaaaaacctgcacg 375

Query: 58     actcctaactcaaggcaaaactctatgtttccctcatggttgctgtacaaaacctacgatcgg 117
Sbjct: 376   actcctgctcaaggcaa-ctctatgtttccctcatggttgctgtacaaaacctacgggatgg 434

Query: 118    aaattg-acctgtattcccatcccatc-tcctggggctttcc--aaatacctatgg 168
Sbjct: 435   aaattgcaactgtattcccatcccatcgtcctggggctttcgcaaaaatacctatgg 489
  
```

Conclusions

- Transplantation immunology is complex.
- Our Immunogenetic Centre provide expanded immunological monitoring together with virological and drug monitoring of the transplanted patients.
- Our goal is to offer **complete integrated monitoring data of our patients** and to fulfil EFI Standards. For this we need smart IT solutions in our University hospital.
- Clinical and laboratory scientists should work together as a team in order to have a complete overview of the transplanted patients.