

GE Healthcare  
Life Sciences  
Core Imaging

Rob Dekkers  
Global Logistics  
and Distribution Leader  
GE Healthcare (Eindhoven, NL)

Freight Forwarders Forum 2016

The Shipping of Short-lived Radiopharmaceuticals



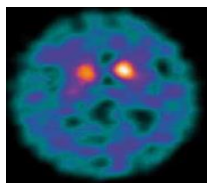
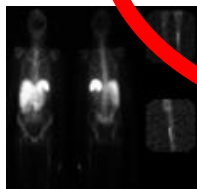


# SPECT Nuclear Medicine Imaging

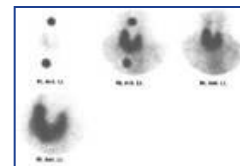
Diagnosics

Parkinson's : DaTSCAN Alzheimer's : Ceretec

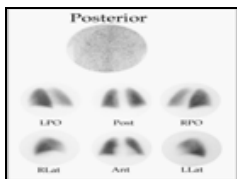
Infection: Indium



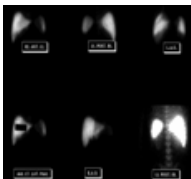
Thyroid Function: Theracap



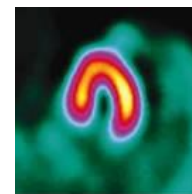
Lung Function : Venticoll



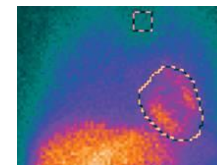
Liver Function : Bridatec



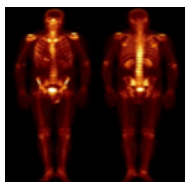
Heart Disease : Myoview



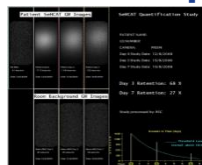
Heart Failure : AdreView



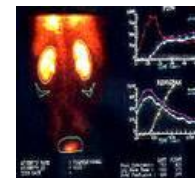
Bone Cancer : Medronate



Bile Acid Malabsorption  
SeHCAT



Kidney: Chromium EDTA



# Our Distribution Challenge

- Dangerous Goods regulations
  - ICAO/IATA, ADR
- Pharmaceutical regulations
  - GMP, GDP, MHRA, FDA
- Security Regulations
  - AEO, Known Consigner
- Speed of delivery
  - decaying products
    - $^{123}\text{I}$ -prods, half-life: 13,2 hours,
    - made to order!
    - From end of mnf to patient → **24 hours**
- Reliability
  - 99%+ service levels
  - High frequency, low volume



# What do I need?

- Fast processes
  - Electronic management of docs, including DG notes
  - Short lead times
- Consistent communication
- Integration of Dangerous Goods and GDP
- A full end2end GDP compliant supply chain