

# DIFFUSION OF THE POSITRON EMISSION TOMOGRAPHY IN CATALONIA

*Strategies for managing the diffusion of high-cost diagnostic technology  
The case of PET scanning*

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- ✓ **Preliminary register results**
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## CATALAN CONTEXT



Catalonia autonomous region with about 6.5 million inhabitants

Health Model: National Health Service

**Catalan Health Service: The planning and the management of health services**



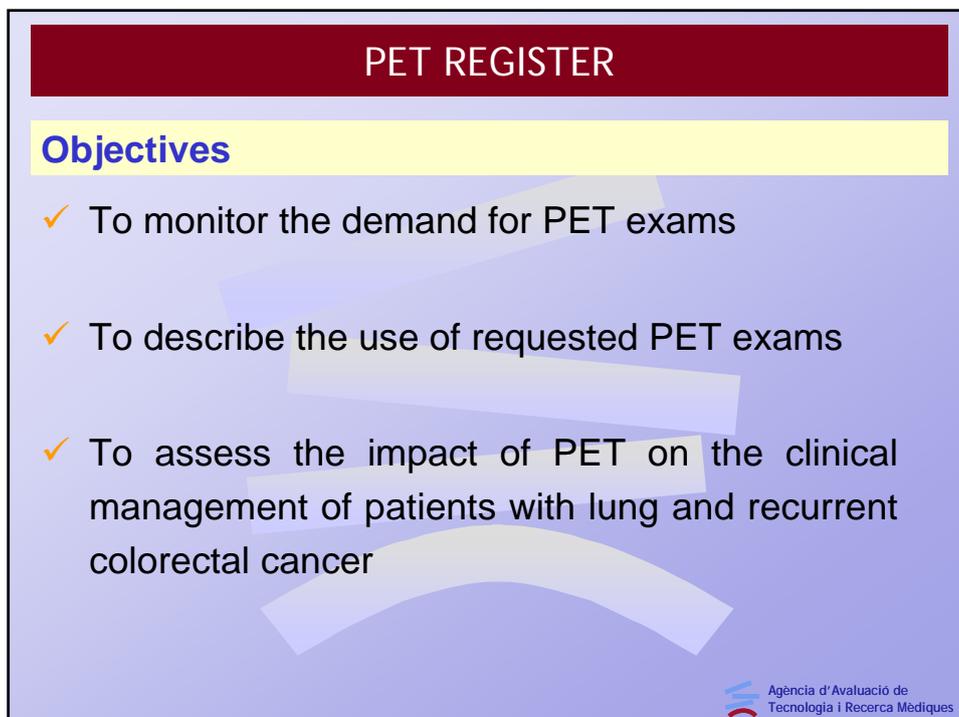
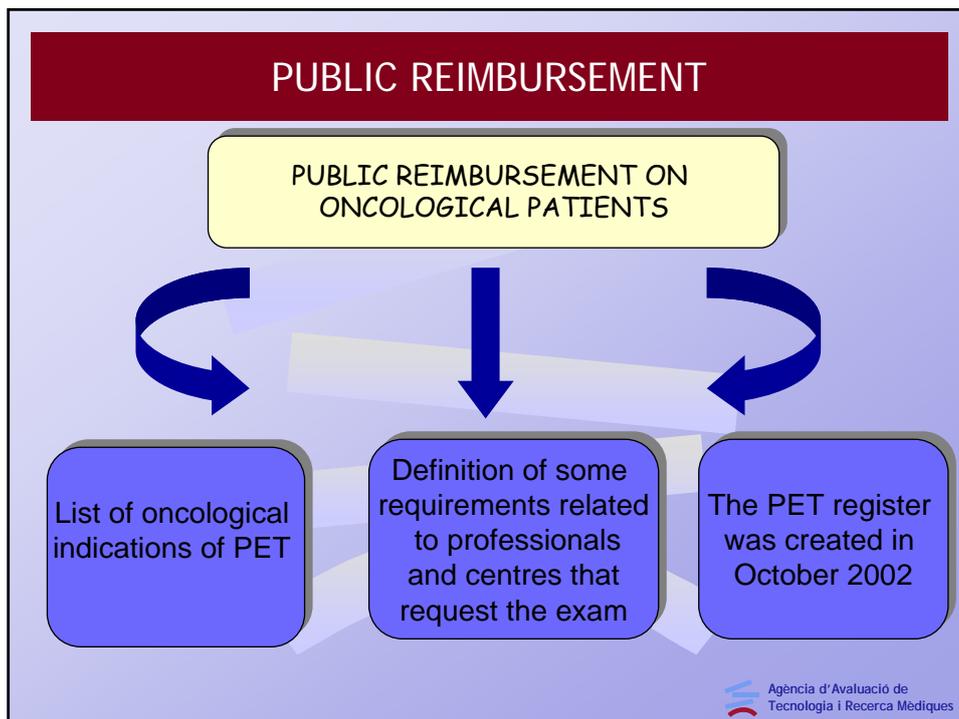
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## PUBLIC REIMBURSEMENT

- ✓ Lack of evidence on the added value of PET
- ✓ The cost of PET images is very high
- ✓ The need to rationalize the demand to favour the appropriateness of indications



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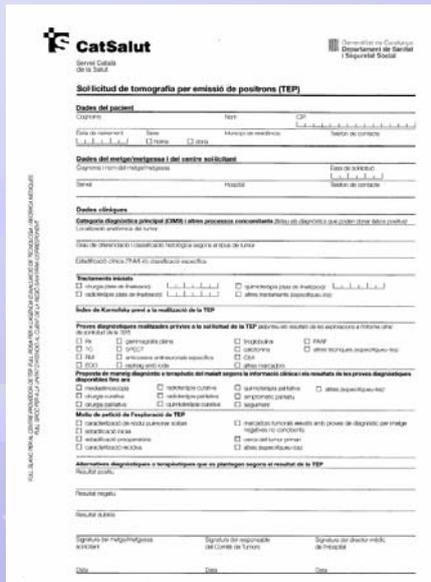
## PET REGISTER

### Main characteristics

- ✓ All PET exams requested
- ✓ Catalan public hospitals
- ✓ Period: from October 2002 to February 2004
- ✓ Two forms were designed to collect the data
  - Request form and impact assessment form

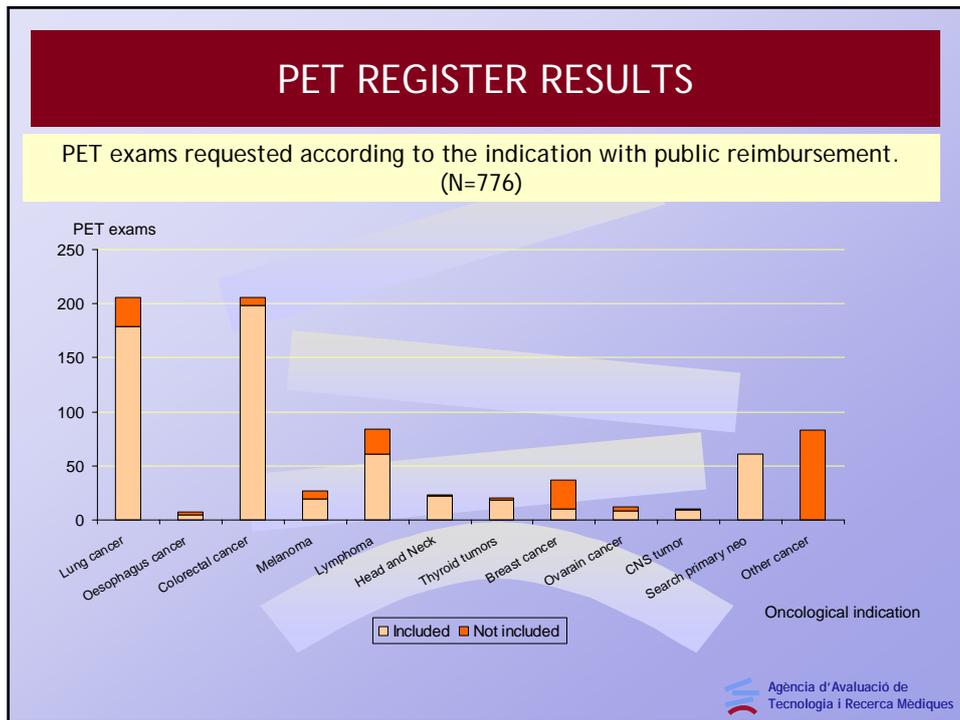


## PET REGISTER







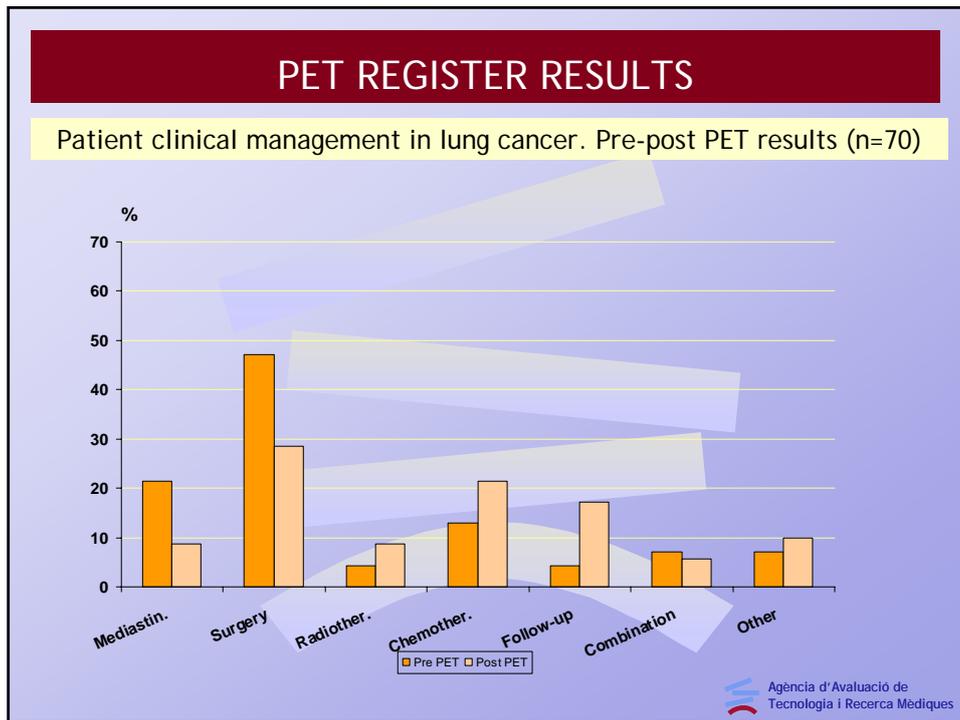


### PET REGISTER RESULTS

Non-small cellular lung cancer (N=206)

Characteristics	Lung cancer n (%)
Mean age : year ( SD)	60 (11.0)
Sex	
Woman	44 (21.4)
Histological classification	
Carcinoma	47 (22.9)
Adenocarcinoma	53 (25.7)
Unknown classification	106 (51.4)
Exams done before the PET	
1 exam	29 (10.7)
2-3 exams	143 (69.4)
>= 4 exams	14 (19.9)
Request reason for the exam	
Initial staging (preoperative)	107 (52.0)
Preoperative staging	34 (16.5)
Preoperative staging /recidivism	23 (11.2)
Other (end of treatment, search for the primary tumor etc)	4 (1.9)
Not available	-

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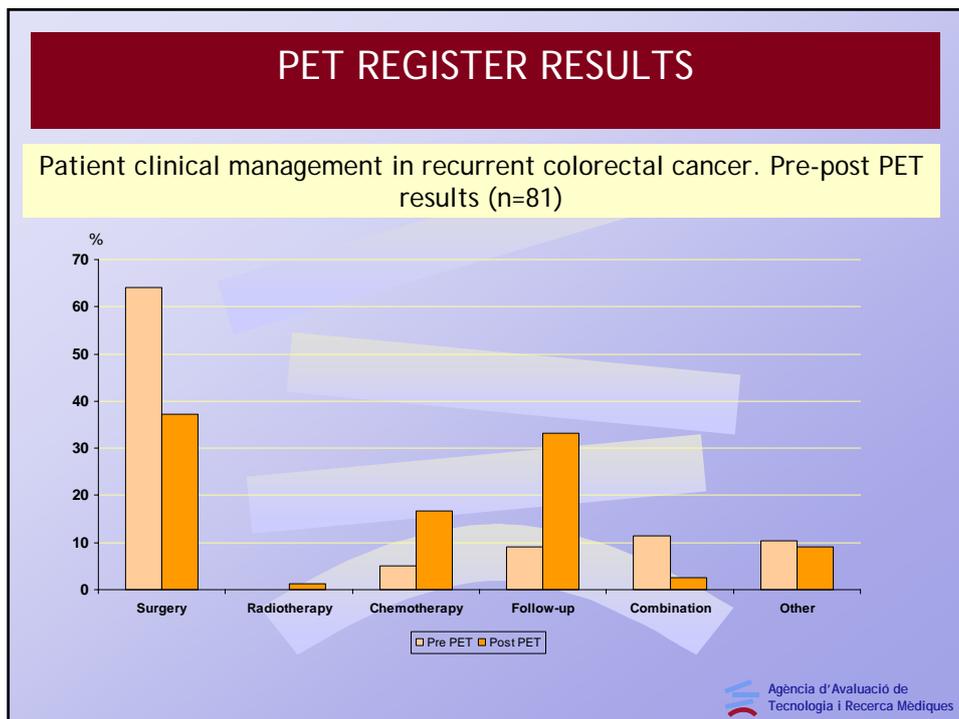


### PET REGISTER RESULTS

Recurrent colorectal cancer (N=206)

Characteristics	Colorectal cancer (n (%))
Mean age : year ( SD)	60 (13.2)
Sex	
Woman	75 (36.4)
Histological classification	
Carcinoma	11 (5.3)
Adenocarcinoma	122 (59.2)
Unknown classification	73 (34.9)
Exams done before the PET	
1 exam	30 (14.6)
2-3 exams	124 (60.2)
>= 4 exams	51 (24.9)
Request reason for the exam	
Initial staging (preoperative)	-
Preoperative staging	34 (16.5)
Preoperative staging /recidivism	66 (32.0)
Tumoral markers	79 (38.3)
Other (end of treatment, search for the primary tumor etc)	8 (2.9)
Not available	19 (9.2)


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- ### FINAL REMARKS
- ✓ The study shows how PET is used in our country and in routine of clinical practice
  - ✓ There is an imbalance between the supply and demand in the first phases of PET diffusion. This growing supply is more related to the marketing of some institutions and to the technology imperative instead. Public reimbursement policy will be determinant for the demand
  - ✓ About 24% of PET exams are not included in the list of indications with public reimbursement. In the future there will be less inadequate cases as the list of indications with public coverage will increase
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## FINAL REMARKS

✓ PET works as an add on technique in the patient management and it does not work as a substitute in front of other diagnostic technologies. However, in some types of cancer PET information contributes to a change in the clinical management of patients

✓ Finally, it seems advisable to spread out this information to physicians if we want to improve patients referrals and the diagnostic exam adequacy.