



The Belgian Virtual Tumourbank Project:

**Data quality control on
primary breast tumour tissue samples**

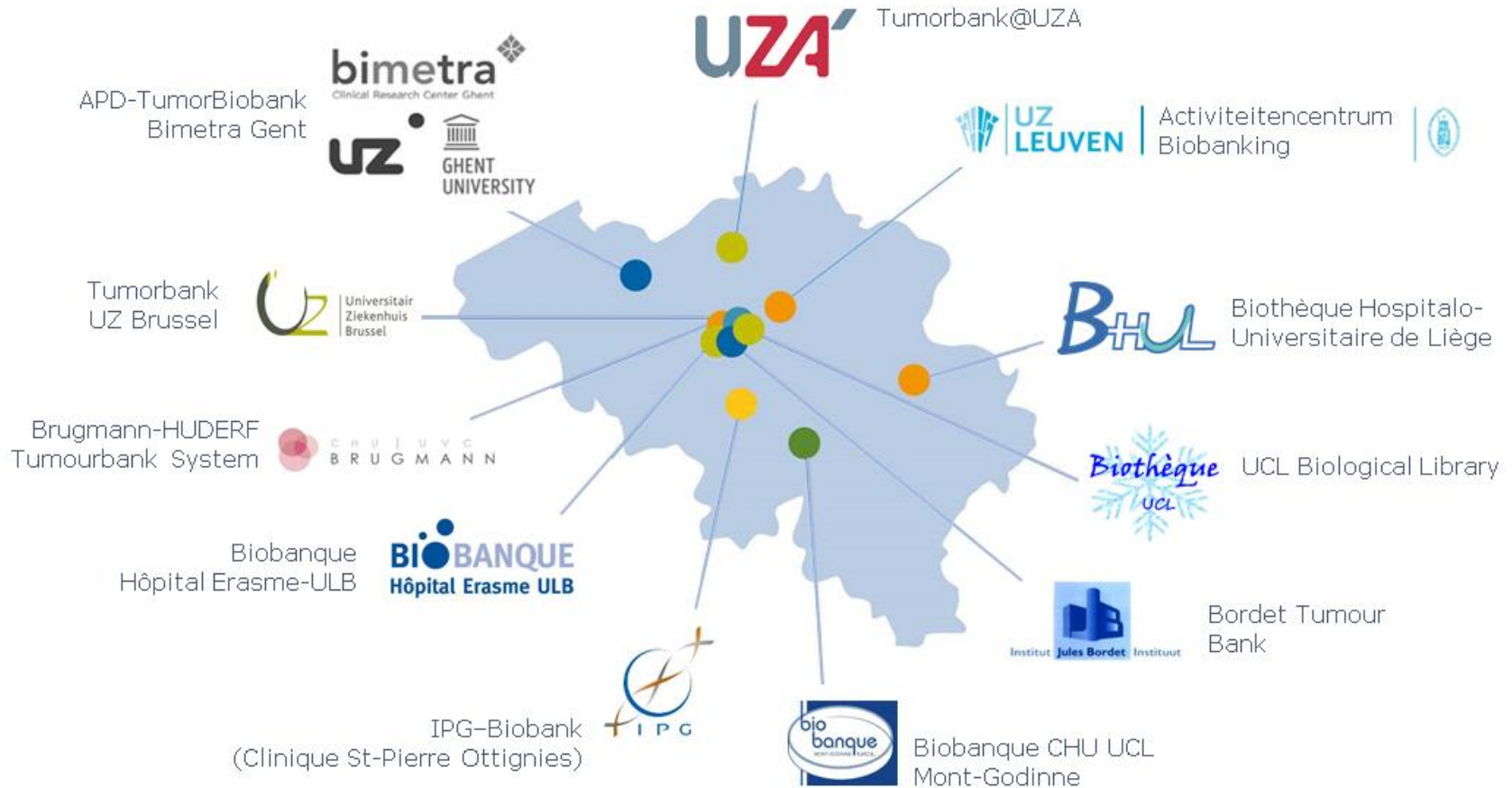
www.kankerregister.org | www.registreducancer.org

Vande Look Kim

Global Biobank Week
Stockholm
15th September 2017

Introduction

The Belgian Virtual Tumourbank Project (11 local biobank partners)



Introduction

From local biobank to catalogue

Partner biobanks



THE BELGIAN VIRTUAL
TUMOUR BANK

AIM

- Centralize the data of residual human tumour samples in a database
- Make a coded version of the database accessible for research



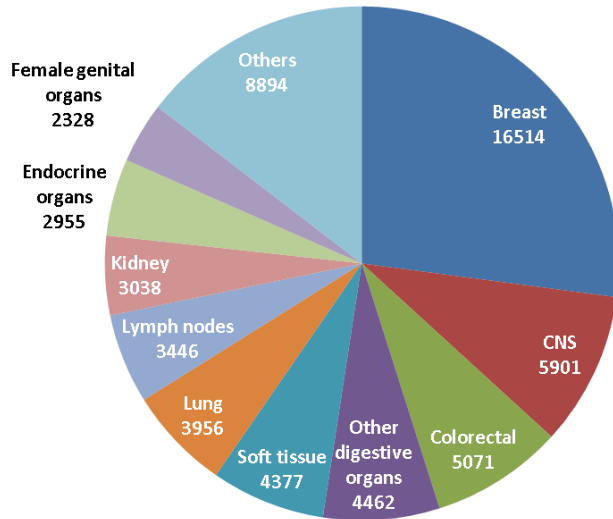
Scientists

Belgian Cancer Registry



Methods

Localisation of primary tumours (n=60,942)



72,787
registrations

BVT Catalogue (BVTc)



- Primary breast tumours (C50)
- Sample year 2014
- Malignant (/3)

2660
registrations



- Random selection of 20 patients per biobank

197
patients

Methods

Overlapping information between BVT and BCR database

- SSIN
 - Gender
 - Birth date
- } Patient variables
- Sample date
 - Biopsy number
- } Technical variables
- Sample type
 - Sample localisation
 - Morphology (histology and behaviour)
 - Differentiation grade
- } Oncological variables
- pT

Results

General information

Variables	n (%)	mean ± S.D.
Age	197 (100)	62 ± 13,50
Gender (female/male)	197 (96,4 / 3,6)	-
Conservation mode (Paraffin/ -80°C)	197 (22,8 / 77,2)	-
Conservation delay (≤30 min/ > 30 min / unknown)	197 (15,7 / 31,5 / 53,3)	-
Available material (only tumour tissue / other material*)	197 (40,6 / 59,4)	-
*corresponding normal tissue	87,2	-
*blood	15,4	-
*serum	12,0	-
*plasma	12,0	-

Results

Validity assessment

Variables	Registered in BVT n (%)	Corrections needed in BVT n (%)
SSIN	197 (100)	0
Birth date	197 (100)	0
Gender	197 (100)	0
Sample date	197 (100)	1 (0.5)
Biopsy number	197 (100)	2 (1.0)
Sample type	197 (100)	0
Sample localisation	197 (100)	1 (0.5)
Laterality	168 (85.3)	3 (1.8)
Histology	197 (100)	10 (5.1)
Behaviour	197 (100)	1 (0.5)
Differentiation grade	136 (69.0)	0
pT	166 (84.3)	1 (0.6)
Additional information		pTNM prefixes to be added in the BVT n (%)
Recurrent tumours (rpTNM)		4 (2.0)
Tumour resection after neoadjuvant therapy (ypTNM)		13 (6.6)

BVT-data of 33 (16,8%) tumours contained 1 (n=30) or 2 (n=3) errors



Belgian Cancer Registry



Conclusions

- ❑ BVT database and Belgian Cancer Registry database (BCR) → Good quality of data
- ❑ Additional information on recurrent breast tumours and neoadjuvant therapy prior to resection of the breast tumour
- ❑ Indication of the relevance of a joint evaluation of biobank and cancer registry information to guarantee a high quality of associated data from biospecimens used in translational cancer research.

Acknowledgments



Belgian Cancer Registry

THE BELGIAN VIRTUAL
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BVT Steering Committee

BVT Partner Biobanks



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