

Translational Studies for ACCOG I

- 85 out of 605 blocks collected
- Questions
 - What determines nodal spread
 - What determines brain metastasis
 - ER, cadherins, RTKs
 - Dasl CGH primary vs nodes

Translational Studies for ACCOG I

- What determines risk of recurrence?
 - high vs standard dose

Translational Studies for ACCOG II

- 150 cases (363 patients)
 - Which patients should get taxane
 - define basal vs luminal on RT-PCR from core
 - dasl CGH to identify genes that predict taxane response

Translational Studies for PCI (ACCOG VII)

- Herceptin plus or minus pericranial irradiation (n=400)
- Hypothesis: RT opens BBB for Herceptin
 - Funded opens very soon!

Translational Studies for PCI (ACCOG VII)

- Primary tumour collection for markers of brain metastasis
- Collection of metastatic disease esp from brain requested from TRICC (feasible?)
- Sequential serum to monitor integrity of BBB rejected by TRICC - single sample only

CONSENT PATHWAY FOR BIOMATERIALS FOR ACTION (PATIENTS CONSENTED PREOPERATIVELY)

- All patients discussed at MDT
- Patient aged over 70 and with Allred ER score of 5 or lower considered as potentially eligible for trial (assumes ER carried out on core biopsy specimen)

- Either Surgeon or Research Nurse obtains generic consent for use of biomaterials in research (local policies will dictate which is appropriate).
- Where local Tissue Bank is collecting prospectively appropriate HTA approved local consent forms will be used.
- Application for access to this material will be sought by the ACTION trial management group upon entry of the patient into the Trial.

- Patient blood samples (2 tubes EDTA, 2 tubes serum) will be taken either by phlebotomist with routine pre-operative bloods or by consenting nurse (ACTION SOP S01a - preoperative blood samples).
- Pathology Department made aware that patient has consented for frozen material to be taken (see ACTION SOP S02-4).

- Storage coordinates of samples logged into to local hospital tissue bank database
- Patient later consented for ACTION and all samples transferred to Wales Cancer Bank for curation
- NB Local Tissue Bank must have HTA licence with approval to store materials for research

CONSENT PATHWAY FOR BIOMATERIALS FOR ACTION (PATIENTS CONSENTED POST OPERATIVELY)

- Patient consented for ACTION
- Where patient has been consented for Local Tissue Bank, ACTION TMG seek access to biospecimens

- Where patient has not been consented for Local Tissue Bank, Research Nurse taking consent from the patient will also seek permission to take an EDTA blood sample and access to a paraffin block from the diagnostic record.

- Patient blood samples (2 tubes EDTA) will be taken either by phlebotomist with routine pre-operative bloods or by consenting nurse (ACTION SOP S01b - post operative blood sample).

- Pathology Department made aware that patient has consented for paraffin material to be accessed and request generated for supply of representative block to the Wales Cancer Bank for the ACTION trial biobank.

- Where pathologist is willing only for tissue microarray cores to be taken, blocks will be returned to the Hospital Department after completion of the arrays

- Blocks and blood samples transferred to Wales Cancer Bank for curation

For TRICC Application need to know

- Number of sites interested in collecting fresh material

- Whether the sites have a local tissue bank and if so what material they routinely collect (and their SOPs)

- Wales Cancer Bank will barcode and store samples

Could also do the following:

- Path QA on frozen sections

- Extract RNA/DNA/Proteins and QA products

- QA paraffin sections (ICC and RNA)

- Prepare TMAs (and do routine ICC)

Can either apply for TRICC funding :

- to cover costs of obtaining biomaterials and storage

- above plus specific research projects - but statistical calculations for biomarkers may be problematic without information on outcome of the Trial.