How should the SACT database support clinical practice?

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What is SACT for?
Audiences:

- Patients
- Industry
- Data
- Regulators
- Clinicians
- Payors
Supporting clinical practice

• Benchmarking

• Support governance/audit

• Outcomes in routine care to supplement RCTs/prospective trials
Benchmarking

Services

Activity - type and volume

Outcomes
Routine reports – understanding and meeting user needs (trusts)

SACT provider trusts:

• Quarterly updates based on six month period of activity, including on:
  • Number of patients receiving treatment for each tumour group
  • Information on number/proportions of regimens reported by treatment intent and tumour group, as well as information on performance status
  • Outcome summary data
  • Drugs administered by tumour group and dosing of selected drugs (including simple information on dose banding)
Treatment Variation
• Use of chemotherapy (around surgery) varies by age, independently of other patient & tumour characteristics

• There is regional variation in chemotherapy use and regimens
• Benchmarking

• **Support governance**

• Outcomes in routine care to supplement RCTs/prospective trials
Governance

National audit – bowel, breast, lung
Local - mortality meetings
Individual
Ad-hoc
Supporting patient care – 30 day mortality
Methods

We included:

- Data from Jan – Dec 2014
- Breast and Lung Cancer patients (94% & 92% complete)
  - Date of death data (some linked from NCRAS)

We Examined the effects of:

- Treatment intent
- Age
- Performance status
- Others...

Logistic Regression analysis

- Adjusted results for impact of all other factors
- 99% confidence limits (p ≤ 0.01)
EARLY MORTALITY IS:

- Higher for palliative chemotherapy
- Higher for lung cancer than breast cancer patients
- Higher than expected - may reduce survival benefit for some patient groups
EARLY MORTALITY IS:
- significantly higher for older patients receiving curative SACT
  - And higher than estimates from some clinical trials, e.g. TACT breast cancer trial (0.2%) – may reduce survival benefit
EARLY MORTALITY:
- May be higher in older patients for curative SACT
EARLY MORTALITY IS:

- significantly higher for breast cancer patients with worse general wellbeing (performance status)
EARLY MORTALITY IS:

- significantly higher for lung cancer patients with worse health (performance status)
Expended to include <30 day mortality data (2015/16) available for:

Lung, Breast, AML, Colon CTYA, Upper GI

Intent, trust age categories
• Benchmarking

• Support governance

• Outcomes in routine care to supplement RCTs/prospective trials
RCTs in advanced cancer

Often underpowered

Surrogate endpoints eg PFS

Fragility

How representative of routine care?

Emphasis on the need for real world outcomes
RCT vs ‘Real world’ outcomes

Hazard ratio 0.81 (95% CI 0.66-0.99), p=0.041

Deaths: 274 (54%), eribulin; 148 (58%), TPC

Kaplan-Meier survival estimate

Eribulin
• Appraisal and Funding of Cancer Drugs from July 2016 (including the new Cancer Drugs Fund)
SACT (supported by other NCRAS datasets) is a powerful tool to improve our understanding of the therapeutic index of systemic therapy in cancer and thus improve decision-making.
SACT isn’t a black box!

• SACT website - [www.chemodataset.nhs.uk](http://www.chemodataset.nhs.uk)

• CancerStats2 registration
  • [www.cancerstats.ndrs.nhs.uk/user/register](http://www.cancerstats.ndrs.nhs.uk/user/register)

• CancerStats2 report access
  • [www.cancerstats.ndrs.nhs.uk](http://www.cancerstats.ndrs.nhs.uk)

• SACT webinars