Developments in cancer research: Supportive and Palliative Care
Multi-perspective learning: integrate and adapt

Complex interventions
Outcomes

Evidence
Synthesis

Early and late phase
Trial design

Implementation
Science

Marie Curie
Palliative Care Research Centre
CARDIFF
Integrate and succeed...

MCRC
Cardiff University

CTR
SURE
MRC Hubs

UK and international
NCRI
ASH
RANO

NIHR
Charities
Industry
A blood atlas of COVID-19 defines hallmarks of disease severity and specificity

COvid-19 Multi-omics Blood Atlas: COMBAT

This article is a preprint and has not been peer-reviewed [what does this mean?]. It reports new medical research that has yet to be evaluated and so should not be used to assist clinical decision making.
Paradigm shift:

- Multi-omics
- Multi-modality
- Multi-data
- Multi-centric
- Value-based

Personalised treatment plan
Supporting Multi-perspective Analysis to Refine Treatment: SMART MDT
Traditional cancer MDT model
Precision medicine approach of future MDT
SMART MDT: personalized medicine

- Oncogene addiction
- Synthetic lethality
- Multi-modality
  - Radiomics
- Immunotherapy
- Circulating biomarkers
- Lean body mass imaging
- Task performance
- Personalised plan
- Priorities and preferences
Wales Cancer Research Centre

Treatment and Care Domain

Research that follows the patient journey

Prevention and Diagnosis
- Personalised prevention
- Enhanced diagnosis

Treatment and Care
- Improved patient outcomes
- Optimised patient experience

Risk → Early detection → Screening & diagnosis → Treatment → Supportive care → Survivorship → End of life

MDRGs
Patient preferences and resilience to treatment

Professor Annmarie Nelson
Professor Anthony Byrne
Dr Michelle Edwards
Dr Daniella Holland Hart
PrEdicting Treatment Resilience in Oesophageal cancer
Systemic treatment : PETROS

**Imaging**
- SMI
- myosteatosis

**Biomolecules**
- CRP, albumin
- Hb, wcc ratios

**Function**
- SPPB/ADLs
- Comorbidities
- Social

**Treatment Tolerance:**
- Delays, dose reduction discontinuation

**Assessment of sarcopenia and changes in body composition after neoadjuvant chemotherapy and associations with clinical outcomes in oesophageal cancer**

Conal Yip, Vicky Goh, Andrew Davila, James Gouge, Rosalind Mitchell-Hay, Orla Hyson, Nick Mainey, Paul Ross, Andrew Gaya, David B. Landau, Gary J. Cook, Nyree Griffee, Robert Manou
Routine data

Biomolecules
Function
Imaging

Resilience for treatment A

Modifiable targets
Alternative treatments
Data integration

Iterative Distributed Learning

Patients who do badly: multi-omics analysis
Accessing the data:

Raw Routine Data → Standardised format → Integration for learning

Dr Kevin Ashelford
Patient preferences: PACT Study

Key findings

The MDTs lacked essential information about the patient’s everyday life and support, or their priorities and preferences.

Performance status did not capture how patients cope in daily life and their ability to tolerate treatment.

Oncologists were challenged by having to negotiate patients’ treatment against MDT recommendation, due to deterioration, or patient preference.

The concept of palliative chemotherapy was commonly misunderstood by patients and the word palliative was often avoided by clinicians, again to avoid distress.
Patient experience and preferences

Health literacy; the activated patient. Patient frames the consultation

Route map. Working with NOP format. Defined palliative care pathway.

Challenge and equip patients to take control of own care. Question prompt lists per consultation.

Frame consultation by patient, not treatment – ‘my preference is’ campaign. Offer all reasonable treatment options including do nothing, not just MDT recommendation.

Formal and recorded inclusion of patient priorities/social context.

IT solutions for documenting and sharing patient priorities – clinical coding and pop up windows.
SMART MDT: personalized medicine

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