

Friday 17th May, afternoon

Demystifying the science behind targeted treatments and immunotherapies for bowel cancer

13.00 **Registration**

13.30 **Biology and genetics of bowel cancer**

- Cell of origin and mechanisms of development
- The tumour microenvironment
- Key mutations and defective pathways and proteins in bowel cancer cells
- Explaining the relationship between mismatch repair deficiency (MMRd), microsatellite instability (MSI) and CPG-island methylator phenotype (CIMP)
- Recent classification systems and what they mean

14.10 **Questions and short break**

14.25 **Targeting the EGFR in bowel cancer**

- Refresher of growth factor receptor signalling pathways and the normal function of EGFR (epidermal growth factor receptor)
- Mechanisms of action of EGFR-targeted antibodies
- Who benefits from EGFR-targeted antibodies?
- KRAS mutation testing and left vs. right bowel cancers

15.00 **Coffee break**

15.20 **Expanding the range of targeted treatment approaches for people with bowel cancer**

- B-Raf inhibitor combinations for people with BRAF-mutated tumours
- Targeting HER2, mutant Ras and Trk proteins
- Should we do more testing? The case for and against extensive mutation testing to select treatments for people with bowel cancer

15.50 **Questions and short break**

16.00 **Progress in immunotherapy for bowel cancer**

- Immunotherapy for people with MMR-deficient/MSI-H bowel cancer
- Immunotherapy for people with MMR-proficient bowel cancer

16.30 **Close**