

A Beginner's Guide to Precision Cancer Medicine

Virtual study day

Monday 18 January 2021

Aims:

The aim of this course, spread over two mornings, is to provide learners with a good, general understanding of the concepts that underlie precision cancer medicine.

The fundamental idea of precision medicine is to offer each cancer patient a treatment approach that is tailored to the unique biology and genetics of their disease. Elaine will explain how far we are able to do this by exploring the features of cancer we can target now, and where we might get to in the future. She will also look at when precision medicine falls down, and why expectations and realities don't always align.

As ever, Elaine will steer-away from scientific jargon, and will use colourful illustrations to explain scientific concepts. However, learners should be warned that there's lots of science! Anyone new to cells, genes, mutations and insights into cancer cells are advised to first attend Elaine's courses on targeted cancer treatments and cancer immunotherapy held on 03 & 04 December 2020.

Audience:

This content is ideal for research nurses, clinical nurse specialists, pharmacists and clinical trials coordinators. It may also be of interest to other healthcare professionals involved in the diagnosis and treatment of people with cancer, and to junior doctors.

Cost:

£50 per day

Register:

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Get in touch:

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Programme- Day 1:

This morning Elaine introduces the scientific concepts that underpin the concept of precision medicine. She looks at the features of cancer cells that we can target, the treatments available, and the tests and technologies needed to match targets with treatments. She also provides examples of where a precision approach is already being used.

10:00 Welcome and Introductions

10:10 Session 1—What does precision medicine mean?

- What's the big idea?
- What are we trying to match with what?
- What treatments are we working with? Do we have a treatment for every target and every cancer?
- What knowledge about cancer are we working with? Is it complete?
- Where do chemotherapy, radiotherapy and hormone therapy fit in?

10:45 Live Q&A

10:55 Break/Sponsor Exhibition

11:00 Session 2—Testing methods and potential treatment targets

- Testing for individual mutations
- Testing for the presence of proteins
- Testing against a panel of mutations
- Looking for patterns of mutations e.g. MSI-High, mutation signatures
- Whole genome, or whole exome, analysis
- Where to look? Archived biopsy vs. fresh tumour sample vs. 'virtual biopsy'
- What information do commercial testing platforms provide?

11:35 Live Q&A

11:45 Break/Sponsor Exhibition

11:50 Session 3—Examples of where precision medicine is already (somewhat) a reality

- Breast cancer: hormone therapies, HER2-targeted treatments
- Non-small cell lung cancer: EGFR, ALK, ROS1, RET, MET, TRKA/B/C inhibitors
- Malignant melanoma: B-Raf/MEK inhibitors
- Bowel cancer: EGFR-antibodies, RAS gene mutations, BRAF mutations

12:25 Live Q&A

Please note that the content will be available for 30 days after the event online.

Sponsors:

The above sponsors provided funding for the study day, but they have had no input into the programme, selection of speakers or topics.