

A Beginner's Guide to Precision Cancer Medicine

Virtual study day

Tuesday 19 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:

www.royalmarsden.nhs.uk/studydays

Get in touch:

Conferenceteam@rmh.nhs.uk

020 7808 2921

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Programme- Day 2:

This morning Elaine turns her attention to the limitations and current realities of precision medicine. Elaine describes why a precision approach isn't always possible, or might not give the best outcome for a patient. She uses the results published in 2020 from the UK-based National Lung Matrix Trial as an example. She also describes various reasons for a patient's lack of benefit and looks at the difference between expectations and reality.

10:00 Welcome and Introductions

10:10 Session 1—Limitations and realities of precision medicine

- What if you can't find a target?
- What matters more – a mutation, a protein, or the immune system?
- The push and pull: the desire for precision vs. providing a treatment for everyone
- Heading in the opposite direction: the case for imprecision medicine e.g. combination checkpoint inhibitor therapy & chemotherapy
- The reality of performing precision medicine trials – reality check from the National Lung-Matrix trial

10:45 Live Q&A

10:55 Break/Sponsor Exhibition

11:00 Session 2—Why a precision approach doesn't always work

- The problem of tumour heterogeneity and co-existing mutations
- The importance of clonal vs. sub-clonal mutations
- Oncogenic mutations vs. over-expression of proteins
- Resistance-causing mutations to targeted treatments and chemotherapy
- Reasons for resistance to immunotherapy

11:35 Live Q&A

11:45 Break/Sponsor Exhibition

11:50 Session 3—Future prospects for precision cancer medicine

- The potential for precision medicine across various tumour types
- Cancers that confound the precision medicine approach e.g. small cell lung cancer (due to its mutations), pancreatic cancer (due to its microenvironment), glioblastoma (due to its heterogeneity)
- What information do you need to make a truly tailored treatment decision?
- Managing patient expectations
- Conclusions

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.