

## Subtitles and transcriptions

Subtitles and transcriptions are available for selected materials for purpose of helping users understand the contents of the educational sessions.

Uncertain words have been indicated with ?? before and after the part. Parts that could not be understood at all have been indicated as [Audio Not Clear].

Every effort has been made to faithfully reproduce the audio of the sessions as recorded. However, no responsibility is accepted for mistakes or omissions. ESO does not endorse any opinions expressed in the presentations.

## Biomarkers quantification

**Prof Ryska:** Good morn... good afternoon, everybody. And welcome to the second session of the European School of Oncology, which is dedicated to digital pathology and its use in everyday practice. In the first part, we heard about experience of several departments with implementation of digital pathology technology into routine. And in the second part, we will talk about biomarker quantification. Biomarkers and their quantification became an essential part, but an essential tool in the diagnosis of different types of tumours and oncologic treatment today is very much dependent on reliable data produced by pathology laboratories. Part of these markers are quantified or detected by molecular techniques. And this is not the scope of today's lecture, but parts of them are detected by immunohistochemical and FISH methods. And this is something where pathologists and our brains play absolutely crucial role. We know from the past that human brain can be quite easily fooled. This is the result of the fact that mankind during development learnt how to use pattern recognition, but... and we are extremely good in that. And this is proven every day in pathology diagnosis. However, we are not that good in quantification, in measurement and let's say, establishment of proportion, size and so on. And our brain is very much prone to give false positive or false negative results in different contexts. And one of the tools which could be used or which can be and will be for sure used in the future to overcome this limitation of our brain is digital pathology. So, we'll hear this afternoon, several lectures about use of digital pathology in quantification of different biomarkers. Catarina, can you introduce the speakers please? Dr Eloy: Sure. It's my pleasure to introduce the speakers of this afternoon. So, we'll have four talks. The first one will be from professor Manuel Salto-Tellez from Queen's University of Belfast. He will talk about PD-L1 digital quantification, which is something that we are all eager to have to easily quantify this biomarker. Then, we'll have professor Arvydas Laurinavicius from the Vilnius University, and he will talk about digital pathology, biomarkers for breast cancer. So, which is also something that is very discussed and very attractive to all of us. Afterwards, we have two speakers from the Karolinska Institute, Professor Johan Hartman and Dr Balazs Acs, that will give us an overview over digital quantification of lymphocytes in breast cancer, also quite challenging and another task that pathologists would like to stop doing which is counting lymphocytes. And the last one to list a talk on colon cancer. We're use digital tools to search for old and new biomarkers, a talk to be delivered by Professor Jakob Kather from the Aachen university in Germany. So, we are looking forward to hear these wonderful talks. Let's hear from the pre-recorded videos.