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Press release

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Basic information

Name: Joan Fledelius Email: Joan.Fledelius@rm.dk Phone: 31603316

Department of: Clinical Medicine

Main supervisor: Professor Jørgen Frøkiær

Title of dissertation: "FDG-PET/CT for response evaluation in Non-Small Cell Lung Cancer patients"

Date for defence: 22-2-2018 at (time of day): 14:00 Place: Regionshospitalet Herning indgang N1, auditoriet i kælderen

Press release (Danish)

Vurdering af behandlingsrespons hos lungekræftpatienter med FDG-PET/CT

Hvilken metode er den mest robuste til vurdering af behandlingseffekt med FDG-PET/CT hos lungekræft patienter? Kan metoden anvendes tidligt i et behandlingsforløb til at vurdere, om en behandling vil have effekt hos den enkelte patient, så behandling uden effekt kan begrænses? Et nyt ph.d.-projekt fra Aarhus Universitet, Health. Projektet er gennemført af overlæge Joan Fledelius, der forsvarer det d. 22/02-2018

De mange nye behandlingsmuligheder indenfor lungekræft, der er kommet til gennem de seneste år har givet bedre behandlingsresultater, men også nye udfordringer. Flere behandlingsmuligheder øger behovet for at kunne vurdere behandlingseffekten tidligt, så der kan skiftes til en ande type behandling hvis effekten udebliver. I denne afhandling undersøges om FDG-PET/CT giver mulighed for tidligere i et behandlingsforløb at vurdere en behandlings effekt.

Resultaterne viser at både subjektiv vurdering og mere objektiv kvantificering af undersøgelserne kan sige noget om patienternes overlevelse, specielt hos patienter i erlotinib behandling. Med den mest sensitive metode, er det muligt allerede efter 1-2 uger behandling med Erlotinib at identificere 41% af dem der vil få konstateret sygdomsprogression på en CT-skanning udført efter vanligt kontrolregime 9-11 uger efter behandlingens start, uden at der ses falsk positive resultater. For flere metoder ses en sammenhæng mellem ændring i FDG-optagelse og overlevelse.

Forsvaret af ph.d.-projektet er offentligt og finder sted den 22/2 kl. 14:00 i auditoriet ved indgang N1, Regionshospitalet Herning, Gl Landevej 61, Herning. Titlen på projektet er "FDG-PET/CT for response evaluation in Non-small cell lung cancer patients". Yderligere oplysninger: Ph.d.-studerende Joan Fledelius, e-mail: Joan.Fledelius@rm.dk, tlf. 31603316.

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Press release (English)

Evaluation of treatment response in lung cancer patients with FDG-PET/CT

Which method is the most robust for evaluating response to treatment with FDG-PET/CT in lung cancer patients? Can we use the method to predict the response early during treatment for the individual patient in order to limit fruitless treatment? The project was carried out by consultant Joan Fledelius MD, who is defending her dissertation on February 22nd 2018

The many new types of treatment that have emerged lately have provided more opportunities for lung cancer patients but also provided us with new challenges. More treatment choices lead to an increased need for an effective way of evaluating the response early during the course of treatment in order to change to another line of treatment in case the first is ineffective. FDG-PET/CT have the potential to be an effective tool for this. Various methods for evaluating the response to treatment with FDG-PET/CT is explorede in this thesis.

The results show that both a subjective approach and more quantitative analysis methods provides information on the treatment effect and patients survival, particularly for erlotinib treated patients. In this patient group, the most sensitive evaluation method enables us to identify 41% of the patients that are later found to have disease progression (evaluated with a CT scan after 9-11 weeks of treatment) without false positive identification. Furthermore, several of the evaluation methods show a correlation between the early change in FDG-uptake and survival.

The defence is public and takes place on february 22nd at 14:00 in the auditorium in the basement, Herning Hospital, Gl. Landevej 61, Herning. The title of the project is "FDG-PET/CT for response evaluation in Non-small cell lung cancer patients". For more information, please contact PhD student Joan Fledelius, email: Joan.Fledelius@rm.dk, Phone +45 31603316.

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