Image-guided radiotherapy and chemotherapy in gynaecological malignancies – focus on adaptive brachytherapy on 8<sup>th</sup>-12<sup>th</sup> September, 2013 in Barcelona, Spain NF13015

I would like to thank the NFOG Scientific Committee for the financial support to attend the ESTRO image-guided adaptive gynecologic radiotherapy and chemotherapy course in this autumn in Barcelona, Spain.

The 13<sup>th</sup> (5<sup>th</sup> international) ESTRO course of image-guided radiotherapy in gynecological malignancies was very well organized. The days were quite heavy but enjoyable with lectures and hand-guided contouring exercises. Course directors were Richard Pötter from Medical University Hospital, Wien and Christine Haie-Meder from Institute Gustave Roussy, Paris. The teaching staff had good contact with participants. The staff consisted of radiation oncologist Primoz Petric from Qatar, Johannes Dimopoulos from Ateena and Umesh Mahanchetty from Mumbai, medical physicist Taran Paulsen-Hellebust from Oslo, Kari Tanderup from Århus and Daniel Berger from Wien, and radiologist Peter Petrow from Paris. There were 84 participants from all over the world including from Canada, Australia, South Africa, Singapore and Hong Kong. There were only 13 Nordic participants, of whom two were from Finland, and I was the only gynecologic oncology along.

This course convinced me that new methods of external irradiation as well as brachytherapy enhance the efficacy of therapy and improve outcomes by increasing disease-free survival, decreasing morbidity and improving the Quality of Life. It has been shown that 3D CRT and IMRT reduces doses to organs at risk compared 2D conventional techniques and seem to have an impact on morbidity. The development of 3D images integrated to 3D treatment planning and verification process represents one of the most important challenges. MRI in brachytherapy with the gynecological applicator in place including interstitial needles leads the treatment to new level. The 3D image based adaptive approach need new assessment of dose volume relations for targets and organs at risk. Gross tumor volume (GTV), clinical target volume (CTV) and organs at risk (OAR) play an important role to assess the dose volumes.

I attended this course together with radiation oncologist Marjaana Luukkaa from Turku University Hospital. Our future goal is to develop our gynecologic radiotherapy to the direction of these new demands, the ESTRO guidelines. This course gave us very good base to start the job. Next it is very important to visit other clinics to see the clinical points of view. Once again, I would like to thank to NFOG for the opportunity to attend this important course of 3D adaptive gynecologic radiotherapy.