

## Session 3.1

### FMU Thyroid Ultrasound Surveys in Fukushima Prefecture

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**Introduction :** Fukushima Health Management (FHM) Survey was planned after TEPCO-Fukushima Daiichi Nuclear Power Plant accident on March 11, 2011. The public of Japan became particularly concerned about the possibility that it could increase the risk of childhood thyroid cancer, similar to what was exactly observed after the Chernobyl nuclear accident. The thyroid ultrasound examination (TUE), as one of the detailed survey of FHM survey, was started from Oct 11, 2011.

**Material and Method:** TUE would cover around 360,000 residents aged 0 to 18 years at the time of the accident. The initial screening is to be performed within the first three years after the accident.

**Results:** The preliminary survey of 269,354 participants (80.8%) was completed in the end of December 2013. Among them, 1,796(0.7%) subjects were recommended to undergo a confirmatory TUE. Of the 369 persons who underwent fine needle aspiration cytology, 75 were diagnosed with a malignant tumor or were suspected to have malignancy. Thyroid surgery of 34 of these subjects revealed that one had a benign thyroid nodule and 33 had thyroid cancers until the end of December 2013.

**Conclusions:** This is first large-scaled report of the baseline TUE survey, which employs sophisticated ultrasound screening. The results will become the golden standard of the future comparative TUE in Fukushima, Japan whether the risk of childhood thyroid cancer will increase or not in future on a basis of well designed epidemiological study.