Purpose/Aim
The purpose of this exhibit is: 1. Define the concept of SPECT/sa-ceCT of parathyroid glands 2. Define the role of multimodality hybrid molecular imaging in parathyroid adenomas 3. To review the SPECT/(sa-ce) CT findings and correlate them with surgical and pathological findings in our study population of 128 patients with query parathyroid adenoma. 4. To discuss the reduction in radiation dose in comparison to conventional 4D-CT imaging.

Content Organization
The role of single-isotop, double phase SPECT/sa-ceCT in parathyroid imaging Describe how to perform and interpret SPECT/sa-ceCT for preoperative localisation of parathyroid adenomas. Show representative cases with surgical and anatomical correlation with SPECT/sa-ce CT Review imaging findings with cases - false positive - false negative Discuss the limitations of this method Summary

Summary
Hybrid molecular imaging with SPECT/4 D CT of the neck is associated with a high radiation exposure to patient. Teaching points of our exhibit 1) Low radiation exposure and shorter scanning time, 'one stop shop'. 2) Better identification of parathyroid adenomas 3) Increase in confidence levels in reporting parathyroid adenomas, enabling the ENT surgeon to perform minimal invasive neck surgery with lesser comorbidity and shorter inpatient time.