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**Title:** Dye-marking and fiducial marker placement via conventional and electromagnetic navigation bronchoscopy (ENB): New interdisciplinary approach to suspicious intrapulmonary nodules

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**Body:** Background: Conventional and electromagnetic navigation bronchoscopy (ENB) is used in diagnostic approach to suspicious pulmonary nodules. Using these techniques to perform fiducial marker placement and dye-marking of lesions can be an innovative approach enabling risk reduced therapy. Materials und Methods: We present 4 cases where conventional bronchoscopy and ENB were used in an experimental interdisciplinary approach for therapy planning. We analyzed indications, endoscopic procedures and post-interventional outcome. Results: In one female patient (history of cervix carcinoma), ENB was used to mark a 2 mm subpleural nodule. The dye-marked pleural spot enabled the surgeon to perform a parenchyma-sparing wedge resection via VATS. The pathological findings showed malignancy. In two male patients (NSCLC), surgery and conventional stereotactic radiotherapy was impossible due to end-stage COPD. ENB was used for fiducial marker placement prior to cyberknife radiotherapy. No procedure related complications were observed. Partial remission could be achieved without post-radiation-fibrosis. In one male patient, a peripheral endoluminal relapse was diagnosed following a right upper lobe resection for a NSCLC. The tumor could not be clearly identified by computertomography, so that bronchoscopic placement of a fiducial marker was performed in order to allow stereotactic radiotherapy. Conclusion: Dye-Marking and fiducial marker placement is a new bronchoscopic techniques for an interdisciplinary approach to suspicious lesions. In the described cases therapy planning was successful, no complications were observed.