Title: Tuberculosis after lung transplantation, Germany, 1993–2012

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Body: Rationale: Solid organ transplant recipients are at increased risk of developing active tuberculosis (TB). Among those, lung transplant recipients (LTR) are considered to have the highest risk of TB. At our institution no routine screening for latent TB infection and no preventive chemotherapy prior to lung/heart-lung transplantation (LTX) is performed, primarily due to the low incidence of TB in the general population, the risk of drug toxicity and the limitations of available screening tests. Objective: To determine the cumulative incidence of active TB after LTX. Methods: We analysed all LTR outpatient visits, which had been entered prospectively into an electronic database over a 19-year period between June 1993 and June 2012. Results: Overall, 28,538 outpatient visits from 1,146 LTRs were analysed, resulting in a total observational period of 6,608 person-years and a median follow-up time of 56 (IQR 21–96) month. Five subjects (crude rate 0.4%) developed TB, resulting in a cumulative incidence rate of 75.7 (95% CI 27.7–167.7) per 100,000 person-years. The corresponding cumulative incidence in the general population was 10.9 (95% CI 10.85–10.95) per 100,000 person-years. Conclusion: To our knowledge, this is the largest cohort of LTRs observed regarding the development of active TB so far. The observed TB incidence after LTX was moderately higher than the incidence in the general population, but considerably lower than previously reported. Our results support the recent TBNET consensus statement, which recommends refraining from routine latent TB screening of transplant candidates in TB low burden settings as no benefit is to be expected. However, surveillance within frequent and centre-based follow-up is crucial.