



# Impact of a high emergency lung transplantation programme for cystic fibrosis in France: insight from a comparison with Canada

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**A high emergency lung transplantation programme in the French cystic fibrosis population led to an increased number of lung transplants. Post-transplant survival was not changed despite sicker patients being transplanted and was comparable to Canada.** <https://bit.ly/2ScK7vv>

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## Abstract

**Background** France implemented a high emergency lung transplantation (HELT) programme nationally in 2007. A similar programme does not exist in Canada. The objectives of our study were to compare health outcomes within France as well as between Canada and France before and after the HELT programme in a population with cystic fibrosis (CF).

**Methods** This population-based cohort study utilised data from the French and Canadian CF registries. A cumulative incidence curve assessed time to transplant with death without transplant as competing risks. The Kaplan–Meier method was used to estimate post-transplant survival.

**Results** Between 2002 and 2016, there were 1075 (13.0%) people with CF in France and 555 (10.2%) people with CF in Canada who underwent lung transplantation. The proportion of lung transplants increased in France after the HELT programme was initiated (4.5% *versus* 10.1%), whereas deaths pre-transplant decreased from 85.3% in the pre-HELT period to 57.1% in the post-HELT period. Between 2008 and 2016, people in France were significantly more likely to receive a transplant (hazard ratio (HR) 1.56, 95% CI 1.37–1.77;  $p < 0.001$ ) than die (HR 0.55, 95% CI 0.46–0.66;  $p < 0.001$ ) compared with Canada. Post-transplant survival was similar between the countries, and there was no difference in survival when comparing pre- and post-HELT periods in France.

**Conclusions** Following the implementation of the HELT programme, people living with CF in France were more likely to receive a transplant than die. Post-transplant survival in the post-HELT period in France did not change compared with the pre-HELT period, despite potentially sicker patients being transplanted, and was comparable to Canada.