

Is There an Association Between Trastuzumab, Trastuzumab Emtansine, or Trastuzumab Deruxtecan and PAH?

STUDY DESIGN

Analysis of the French Pulmonary Hypertension Registry and World Health Organization database between 2004 and 2024 to evaluate incident pulmonary arterial hypertension (PAH) and trastuzumab, trastuzumab emtansine, or trastuzumab deruxtecan

RESULTS

Incident # of cases	
Trastuzumab	0
Trastuzumab Emtansine	8
Trastuzumab Deruxtecan	0



Women with breast cancer
Age 56 years (interquartile range [IQR], 49-61)

Only **trastuzumab emtansine** demonstrated a significant signal of disproportionate reporting using both:

- Broad definition of pulmonary hypertension (information component [IC], 1.46; 0.86-1.95)
- Narrow definition of PAH (IC, 1.76; 0.83-2.46)



Delay between first exposure and PAH diagnosis was 43 months (IQR, 4.5-55)



Five of eight had severe hemodynamic impairment (New York Heart Association III/IV)

In this study, more patients exposed to trastuzumab emtansine developed pulmonary hypertension compared with trastuzumab alone. Further assessment of this safety signal and exploration of pathophysiological mechanisms is needed.