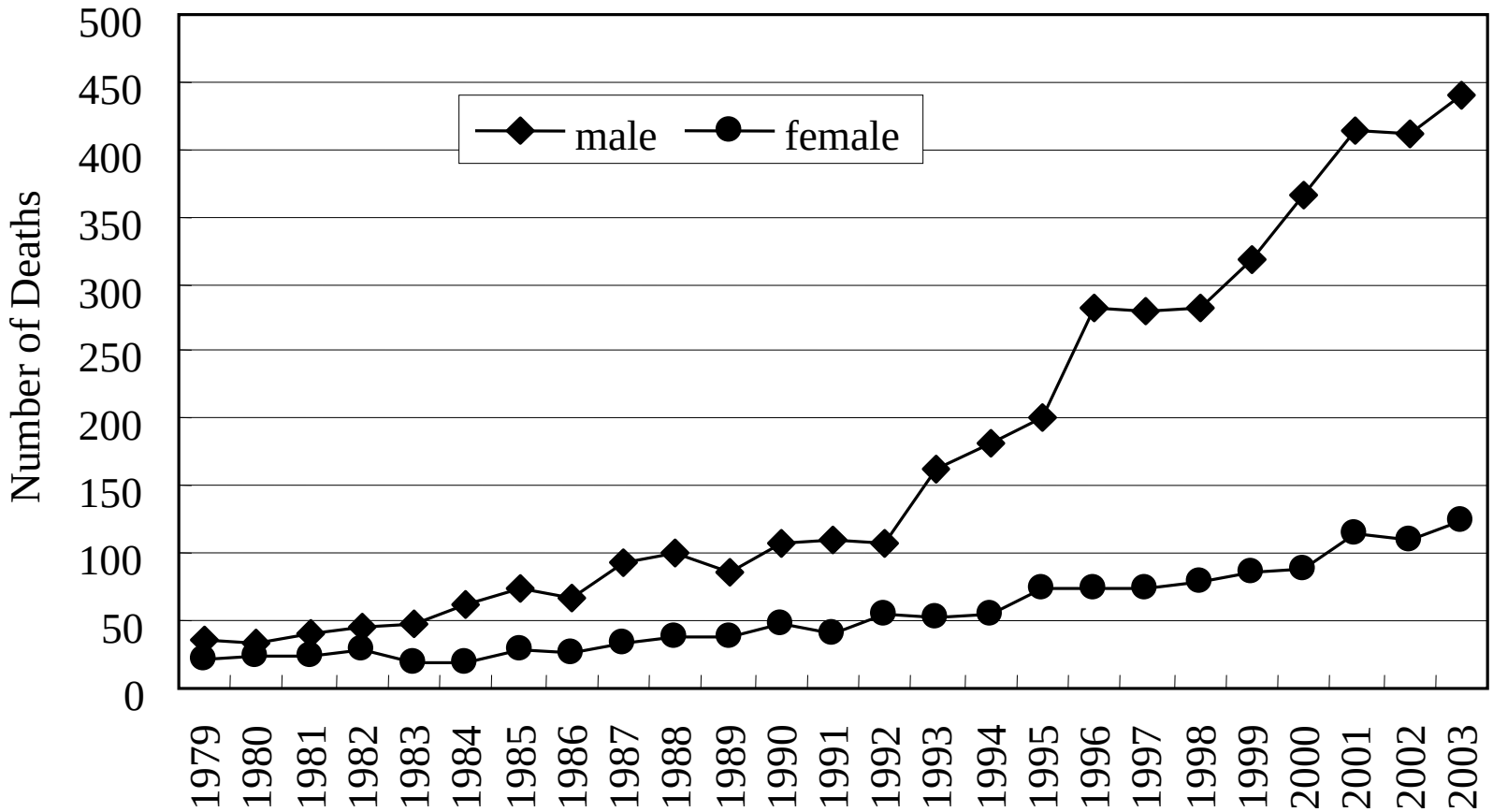
Plenary Session 1

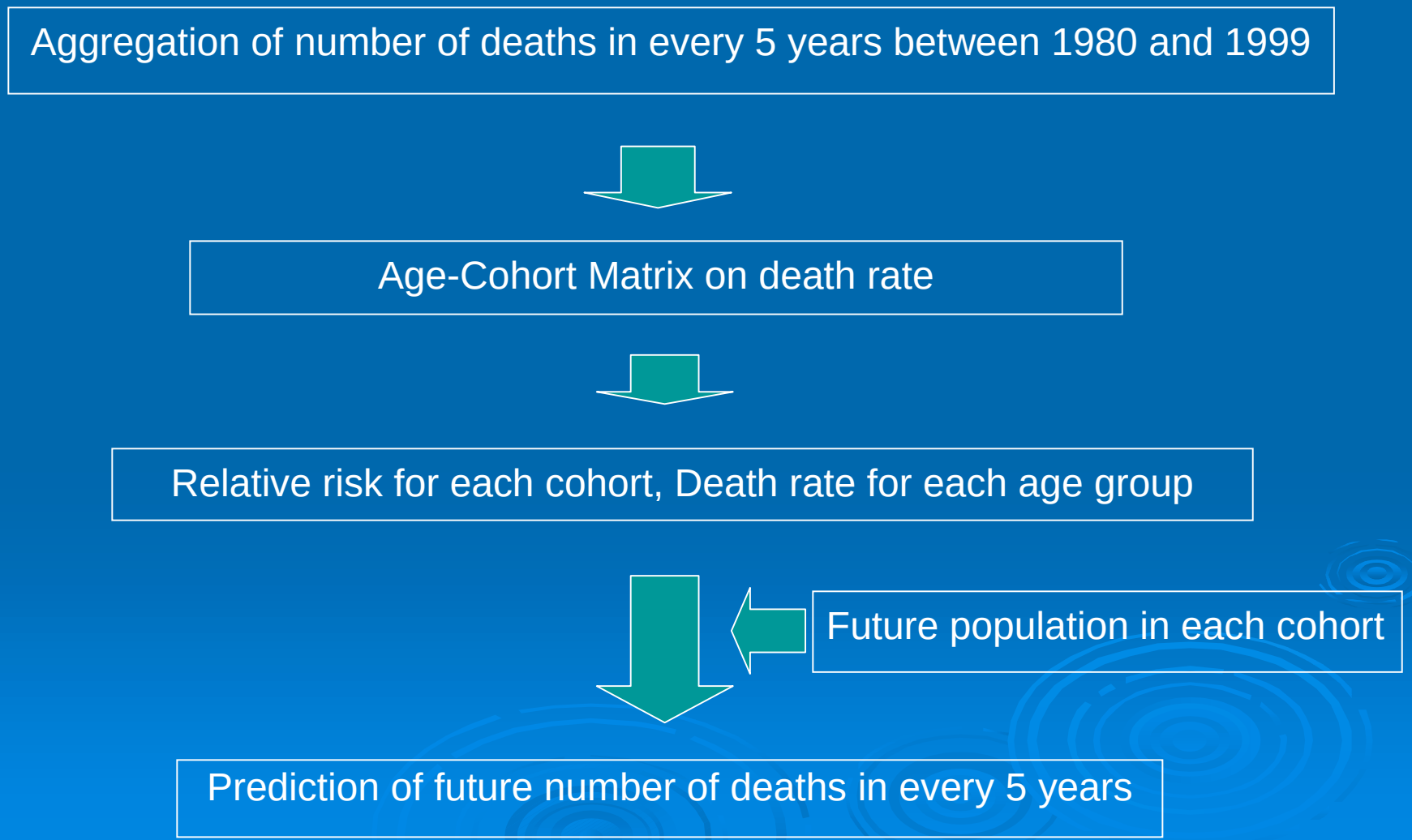
Epidemic of Asbestos-Related Diseases

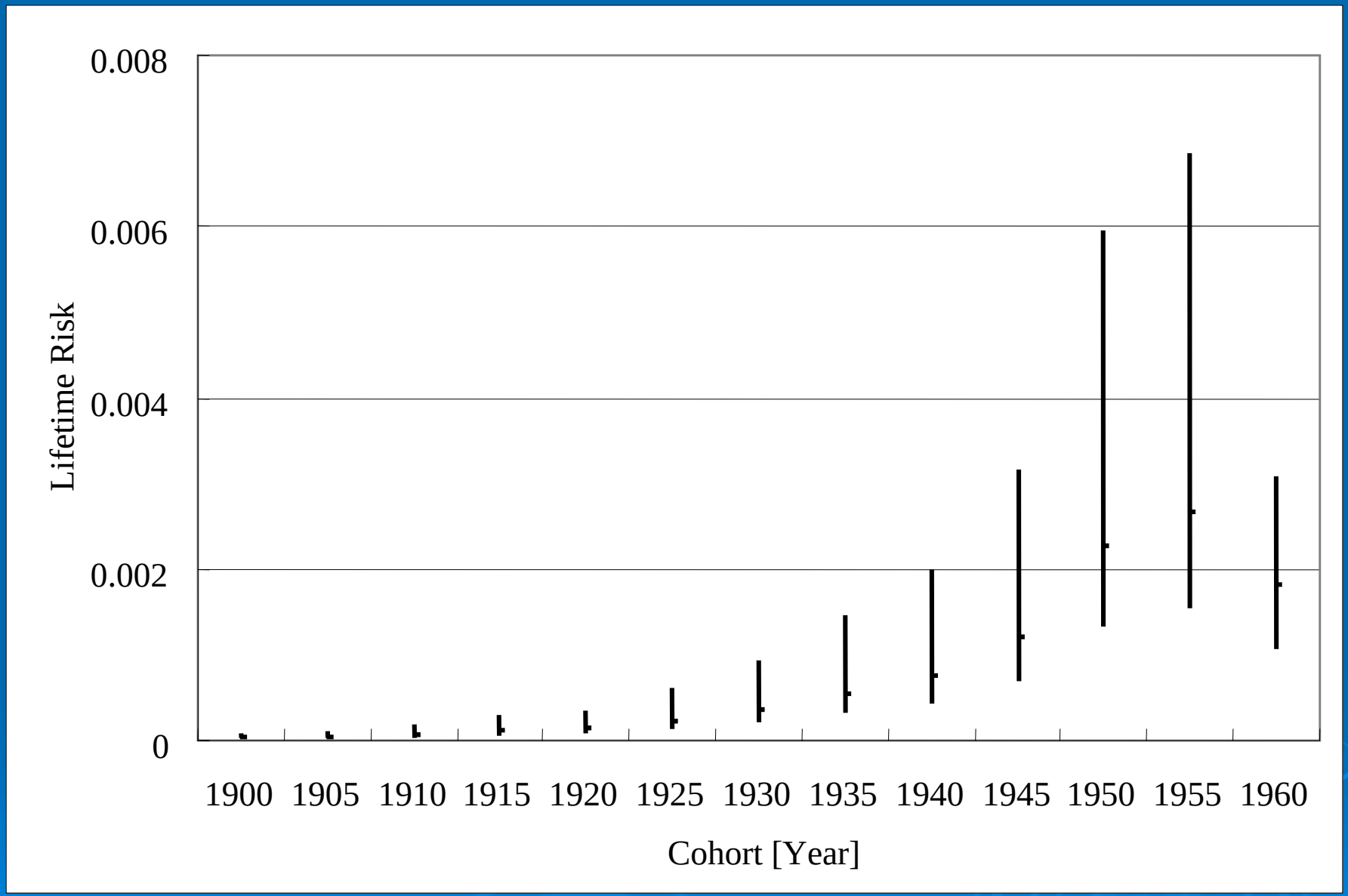
Takehiko•Murayama (Waseda University)



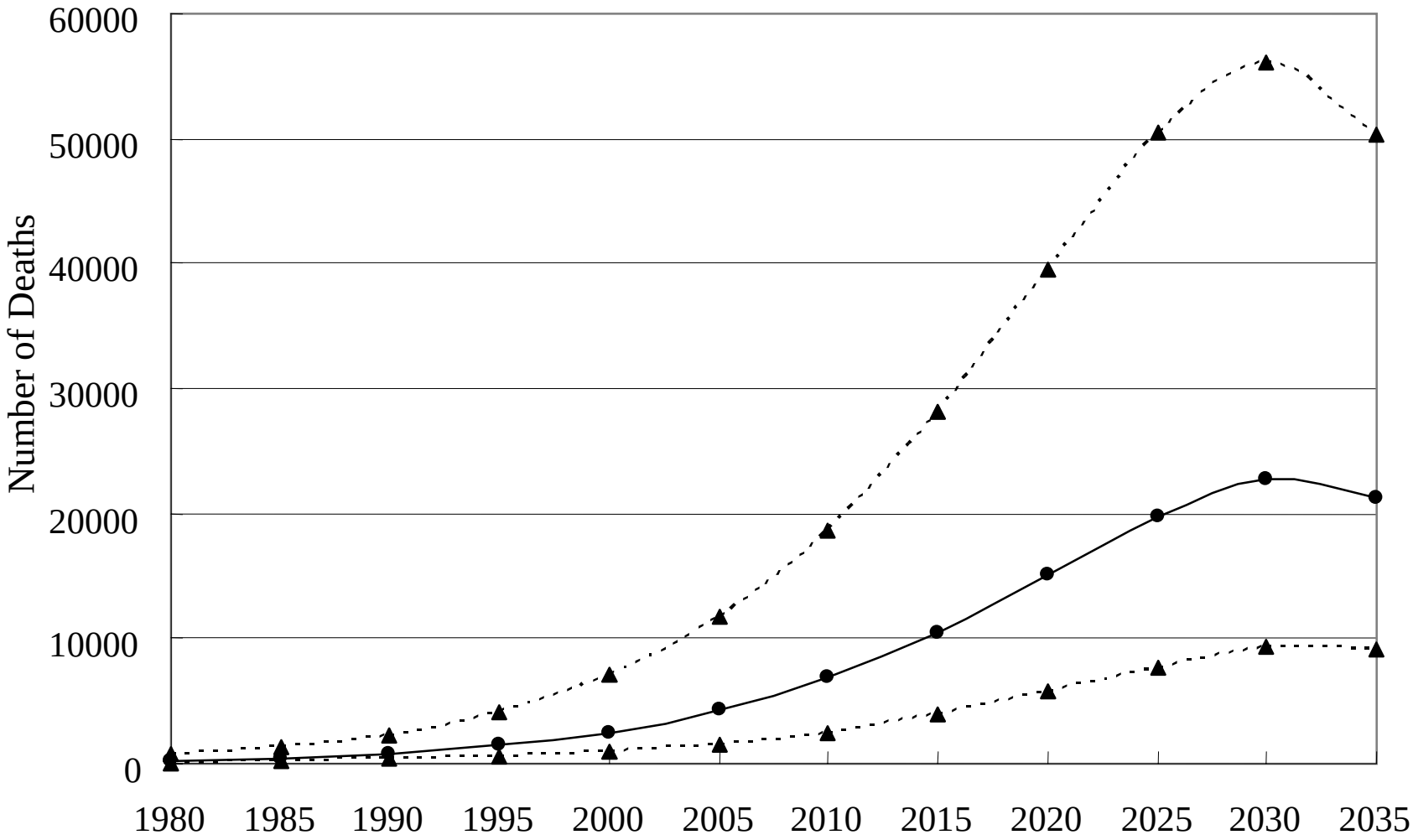
Numbers of deaths from pleural mesothelioma in Japan

Procedure of prediction

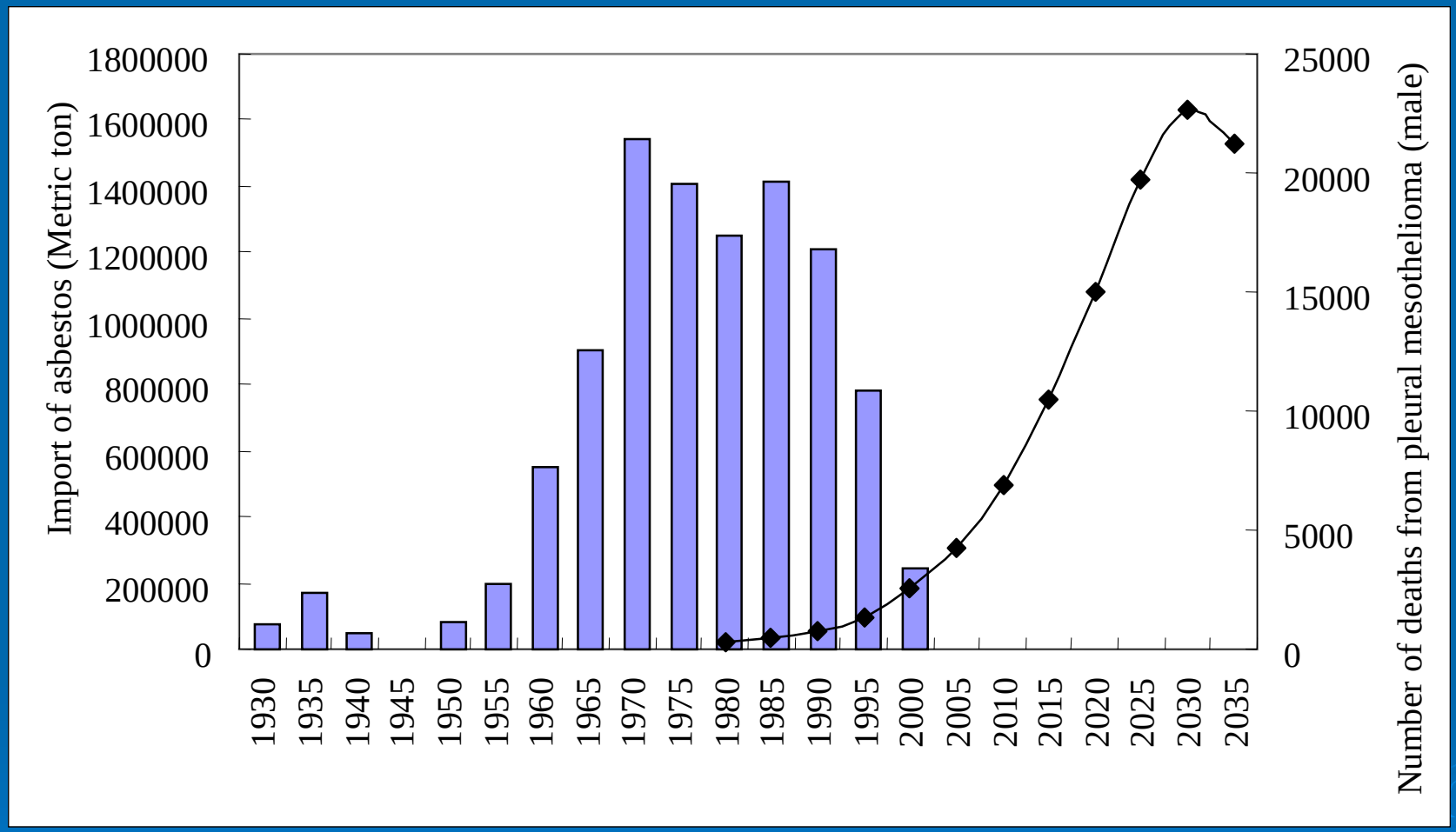




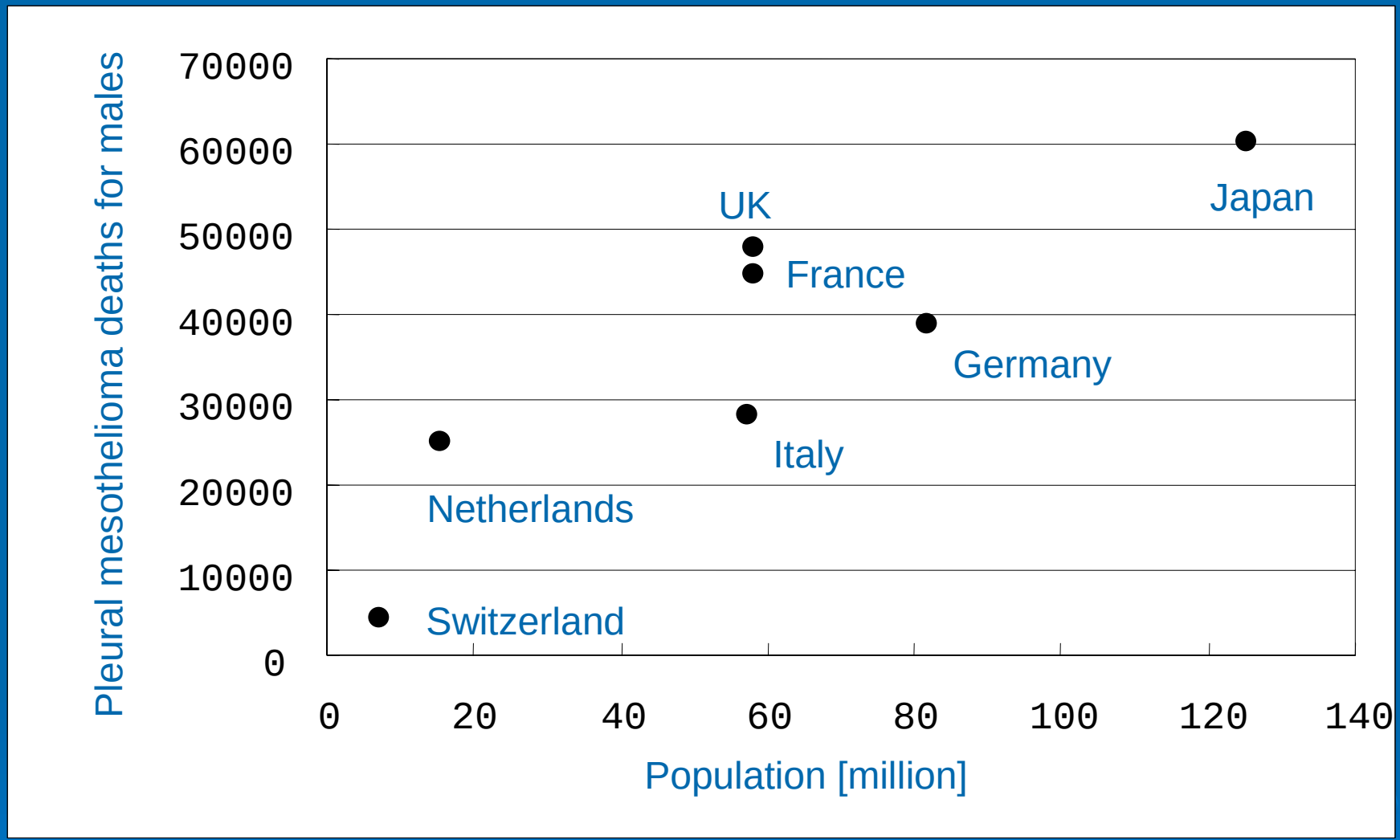
Lifetime risk for each cohort (based on life table of 1960)



Estimated future deaths from pleural mesothelioma in Japan
Solid line: predicted curve for every 5 years, Broken line: 95% confidence interval



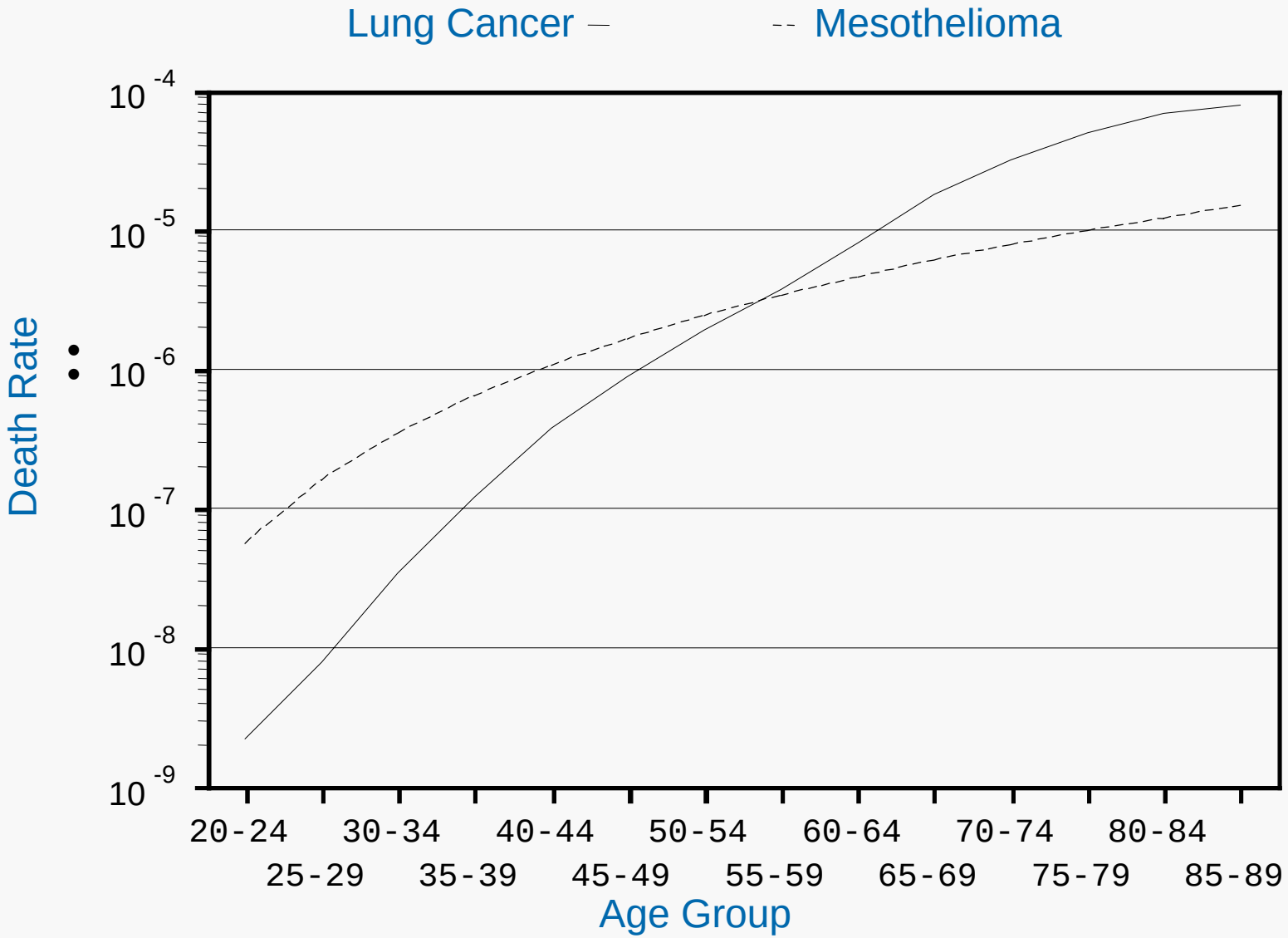
Import volume of asbestos in every 5 years and number of deaths from pleural mesothelioma (male) in every 5 years



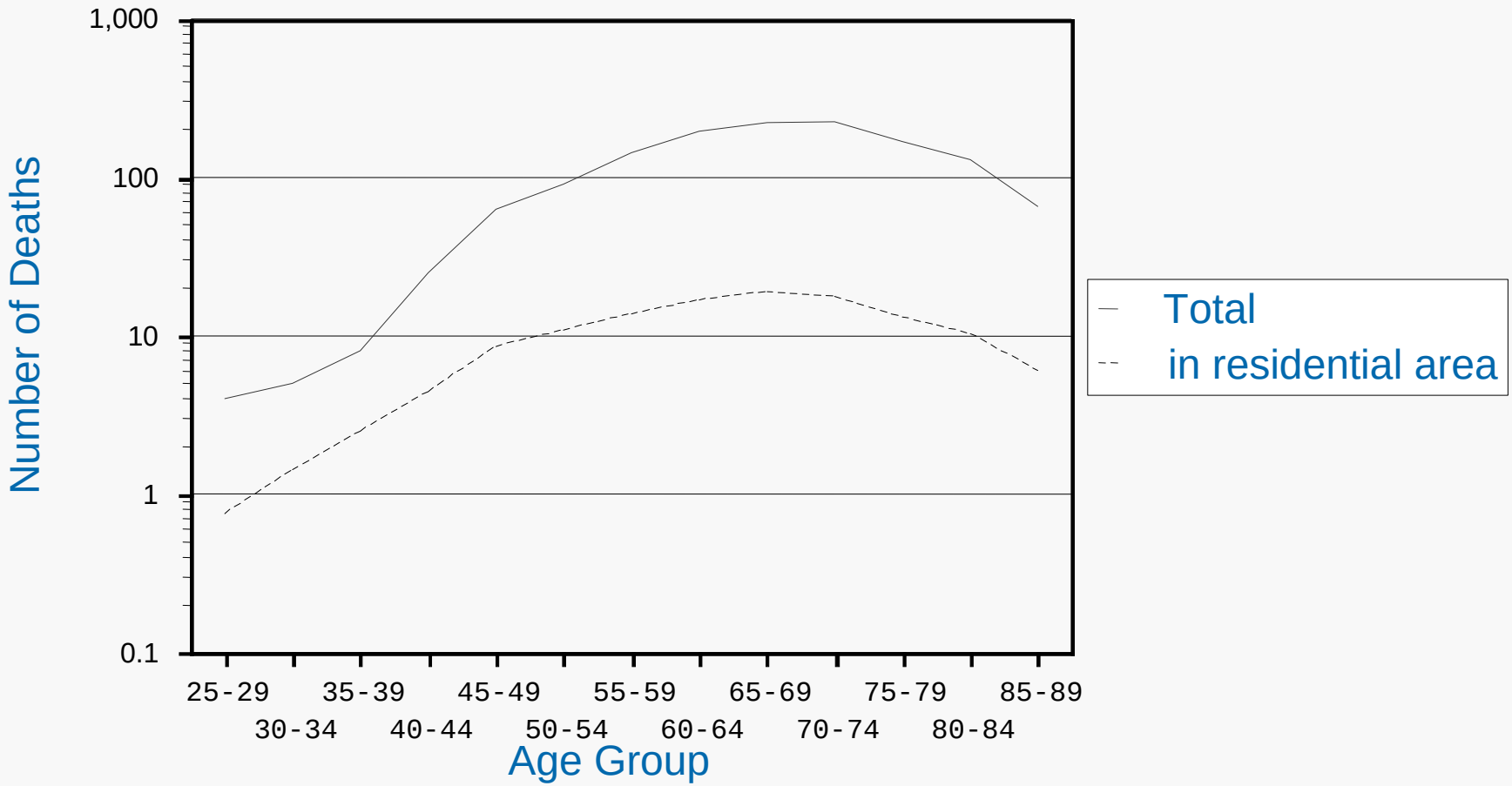
Comparison of Estimated Number of Deaths among Japan and European Countries (1995-2029)

1995
Environmental Asbestos Levels in Japan

	Dispersed Factories	Around Factories	Around Main Roads	Inland and Islands	Residential, Commercial, and Agricultural
Point	11	14	12	6	23
Sample	66	84	72	36	150
[f/ℓ] Concentration	0.04-2.58	0.09-13.47	0.13-1.96	0.04-0.99	ND-1.76



Estimation of risk level in residential area (case of 1 [f/ℓ] based on data 1995-1999)



Comparison between total and estimated number of deaths from mesothelioma case of 1 [f/ℓ], based on data during 1995-1999

Risk in Residential Environment

- Lifetime risk for the public (case of 1 [f/ℓ] in ambient air) →1.7 in 10,000

- Risk level at Virtually Safe Dose (VSD) for Air pollution in Japan: 1 in 100,000
→Substantial measures for reducing risk