**Direct Standardized Cumulative-Hazard Ratio (DS-CMRR)**  
*Model-free,* fixed cohorts, and **no slope normalization**.  
We build vaccinated (dose ≥1) vs unvaccinated (dose 0) cohorts **as of the enrollment sheet**, compute **age-specific cumulative hazards** over time, then **direct-standardize** both cohorts to a **baseline reference distribution** (you can pick vax\_pt or expected\_deaths). Finally we form a **cumulative ratio** and a **delta-method CI** (Poisson counts, age-wise independence) with baseline anchoring to 1 at week ANCHOR\_WEEKS.