



Figure 1: The treatment effect on one year mortality (Y) is estimated as the marginal causal odds ratio  $[(EY1 \times (1 - EY0)) / ((1 - EY1) \times EY0)]$  where EY1 is the effect of treatment conditional on W among those treated ( $E(Y|A=1; W)$ ) and EY0 is the expected effect of the treatment conditional on W among those untreated ( $E(Y|A=0; W)$ ). Y: mortality binary indicator (1 death, 0 alive), A: binary treatment for cancer with chemotherapy versus dual therapy (0 Chemo; 1 Chemo + Radiotherapy); W: w1: Age; w2: Socioeconomic status; w3: Comorbidities; w4: Cancer stage, TNM classification.