

**van Geloven N, Giardiello D, Bonneville EF, Teece L, Ramspek CL, van Smeden M, Snell KIE, van Calster B, Pohar-Perme M, Riley RD, Putter H, Steyerberg E, on behalf of the STRATOS initiative (2022): Validation of prediction models in the presence of competing risks: a guide through modern methods. BMJ.**  
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#### Short summary

This paper focuses on the validation of time-to-event prediction models in the presence of competing risks. Competing risks refer to events other than the event of interest, which can affect the estimation of model performance measures. This is illustrated in a model for breast cancer recurrence, where death from other causes is a competing risk. The authors present a comprehensive and accessible overview of performance measures for this competing event setting, including calibration, discrimination, overall prediction error, and clinical usefulness measured through decision curve analysis. The methods are demonstrated using publicly available data and R code.