Feb 2nd

In today’s meeting I got several questions. The first one is about predictor selection methods that whether the choice of the kind of selection methods is important because it seems that backward stepwise is usually discussed in recent paper. It turns out that only whether the predictor selection method is used that matters. The second one is about EPV (events per variable) and EPP(events per predictor parameter). If the Van Smeden paper says that the EPV is not sufficient then does the discussion in Riley paper about EPP works for recent research as a criterion. There is no conflict because EPV do make sense but not sufficient to make it a single criterion as in “rule of thumb”. Even though rule of thumb is well-used in practice, considering that some categorical variables will bring in several parameters, EPP would have similar effect as EPV and general single threshold values should be avoided to ensure predictive performance. The Van Smeden paper presents that out-of-sample MSPE(mean squared prediction error) and MAPE(mean absolute prediction error) have direct relevance when developing a prediction model. Meanwhile, backwards elimination performs good only when EPV is large but clinical prediction model may base on small or sparse data.