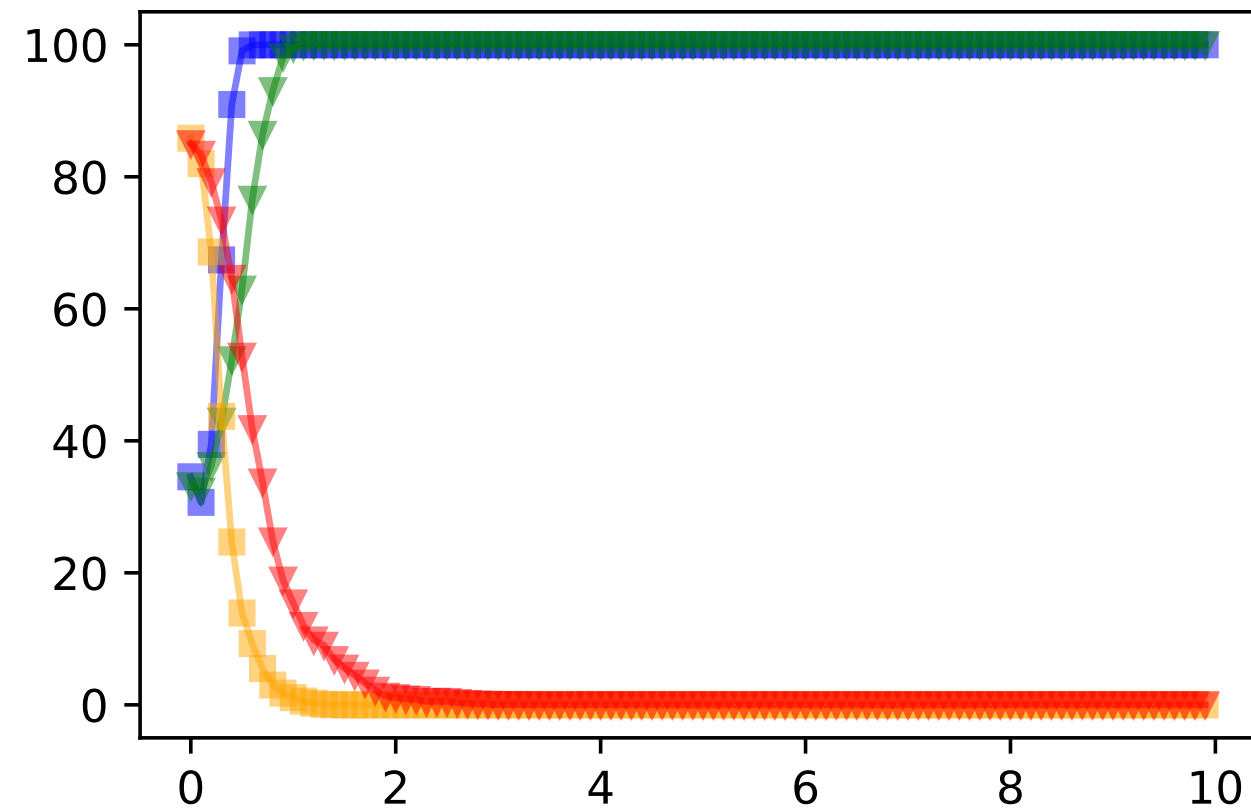


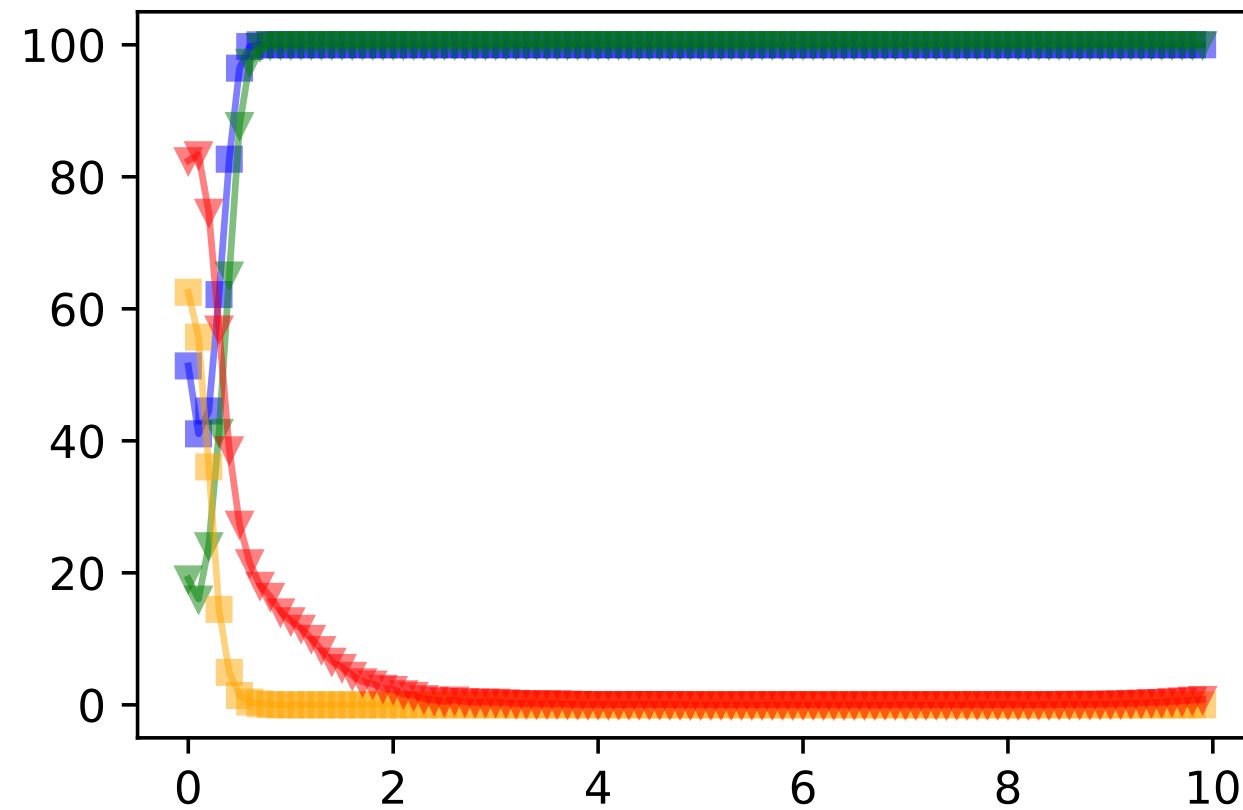
Analysis of Performance and Influencing Factors in NVA SE

The Impact of Basel Model

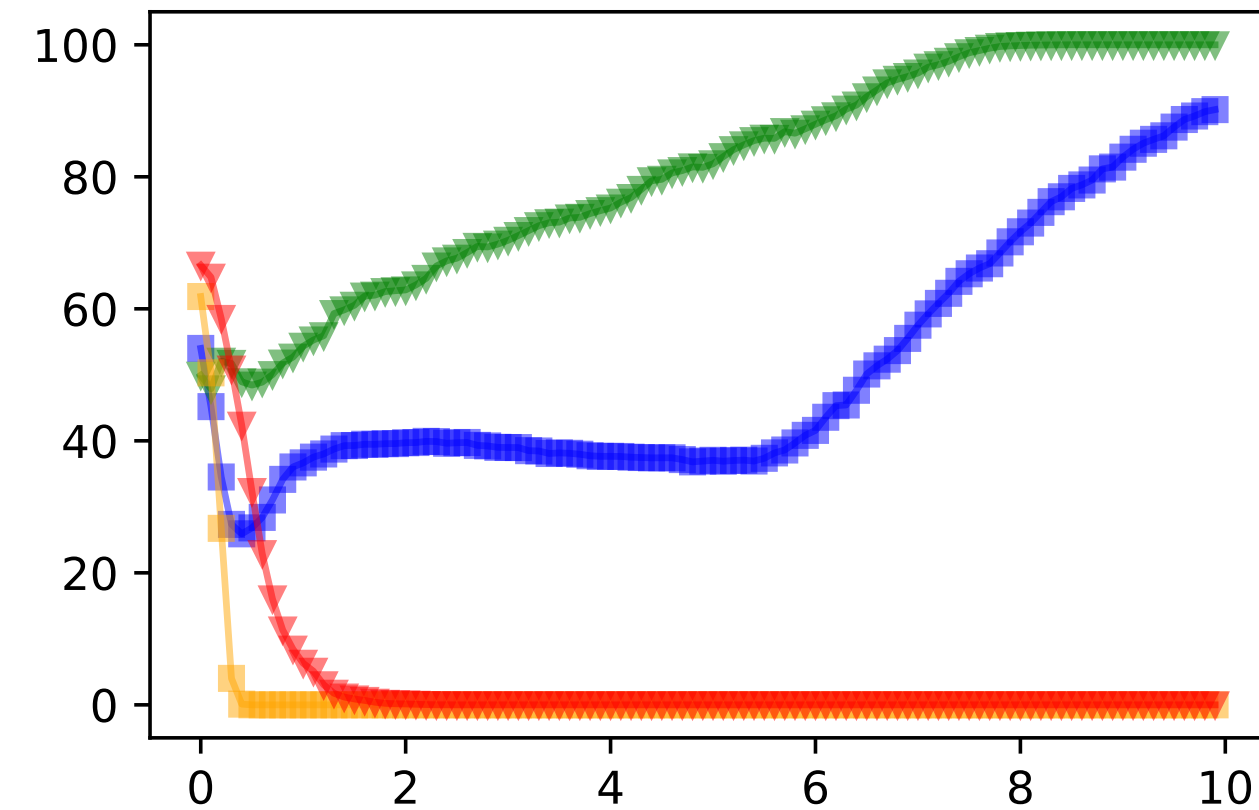
Syn A.1



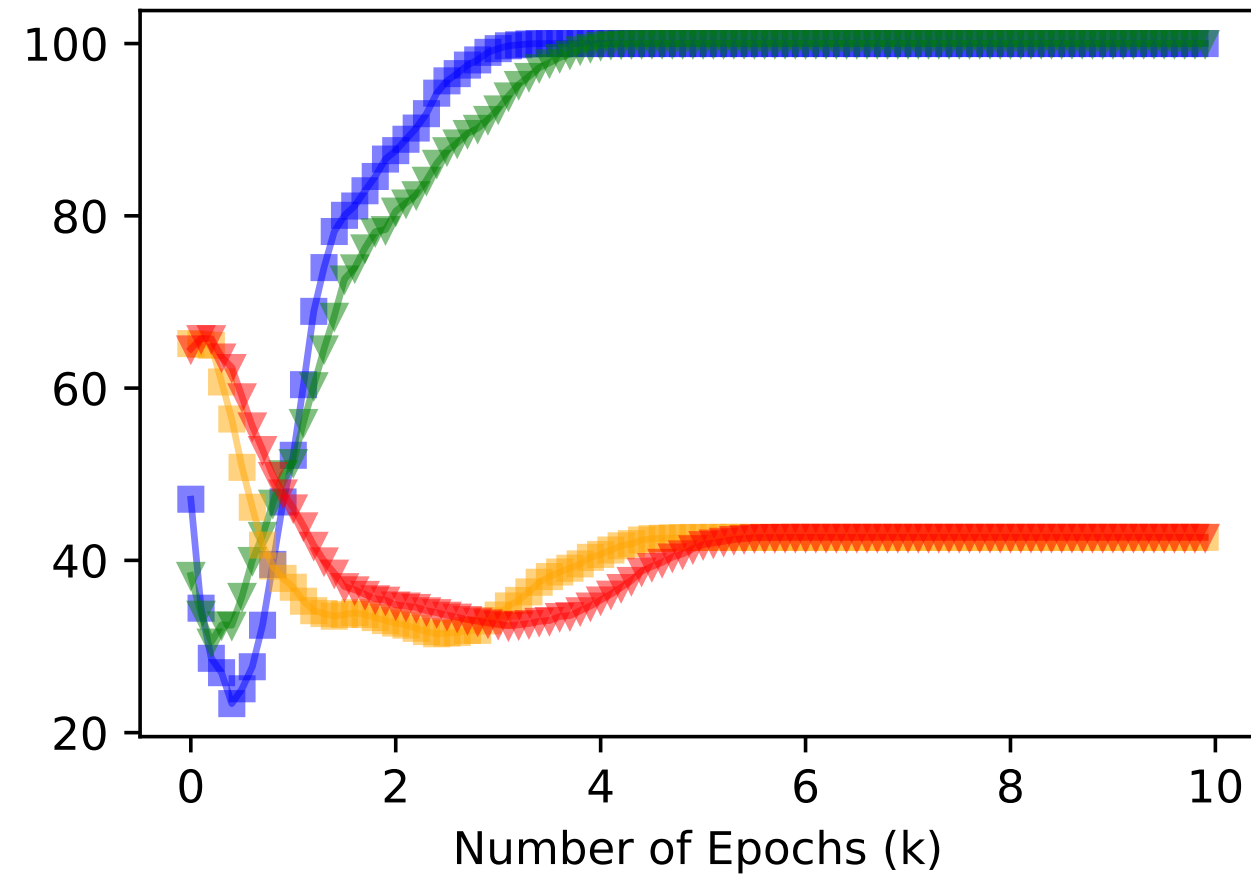
Syn A.2



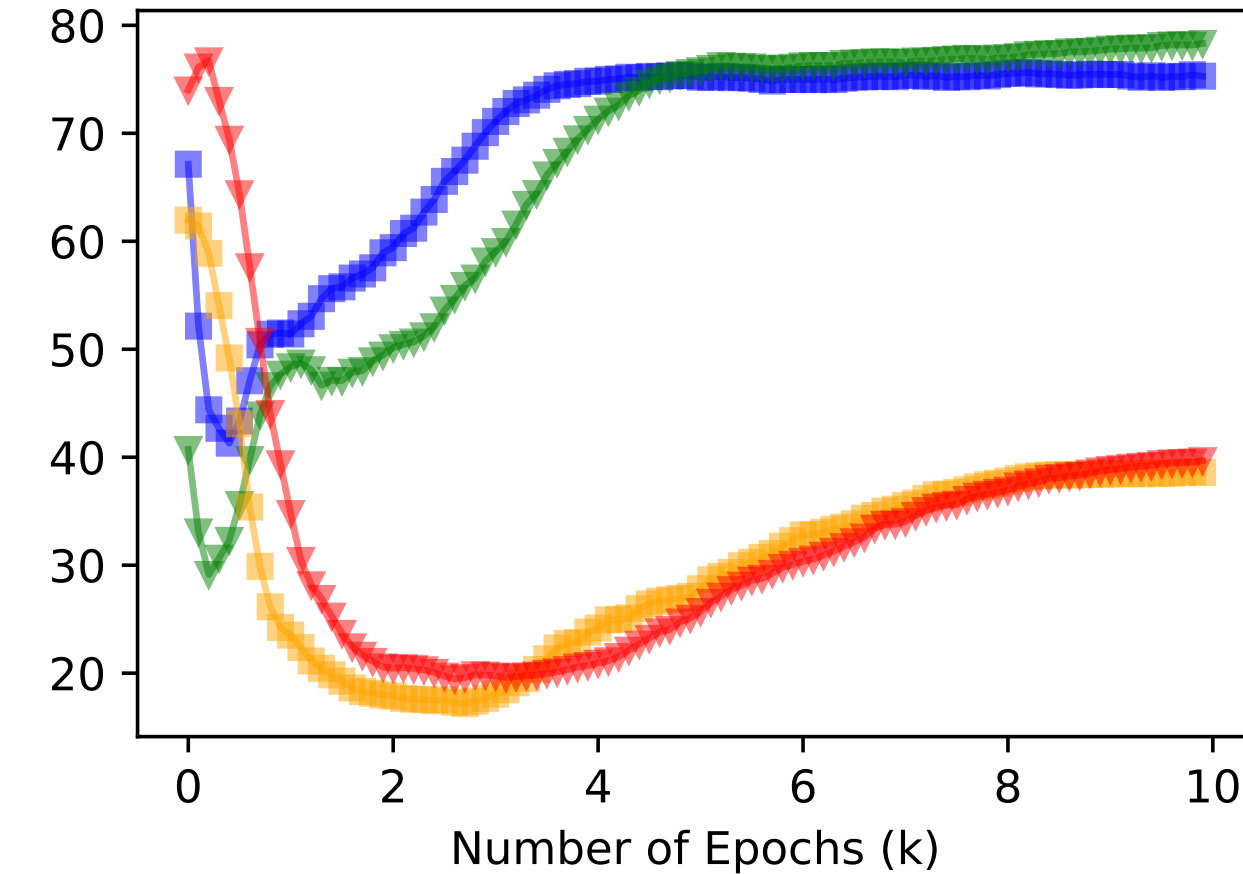
Syn A.3



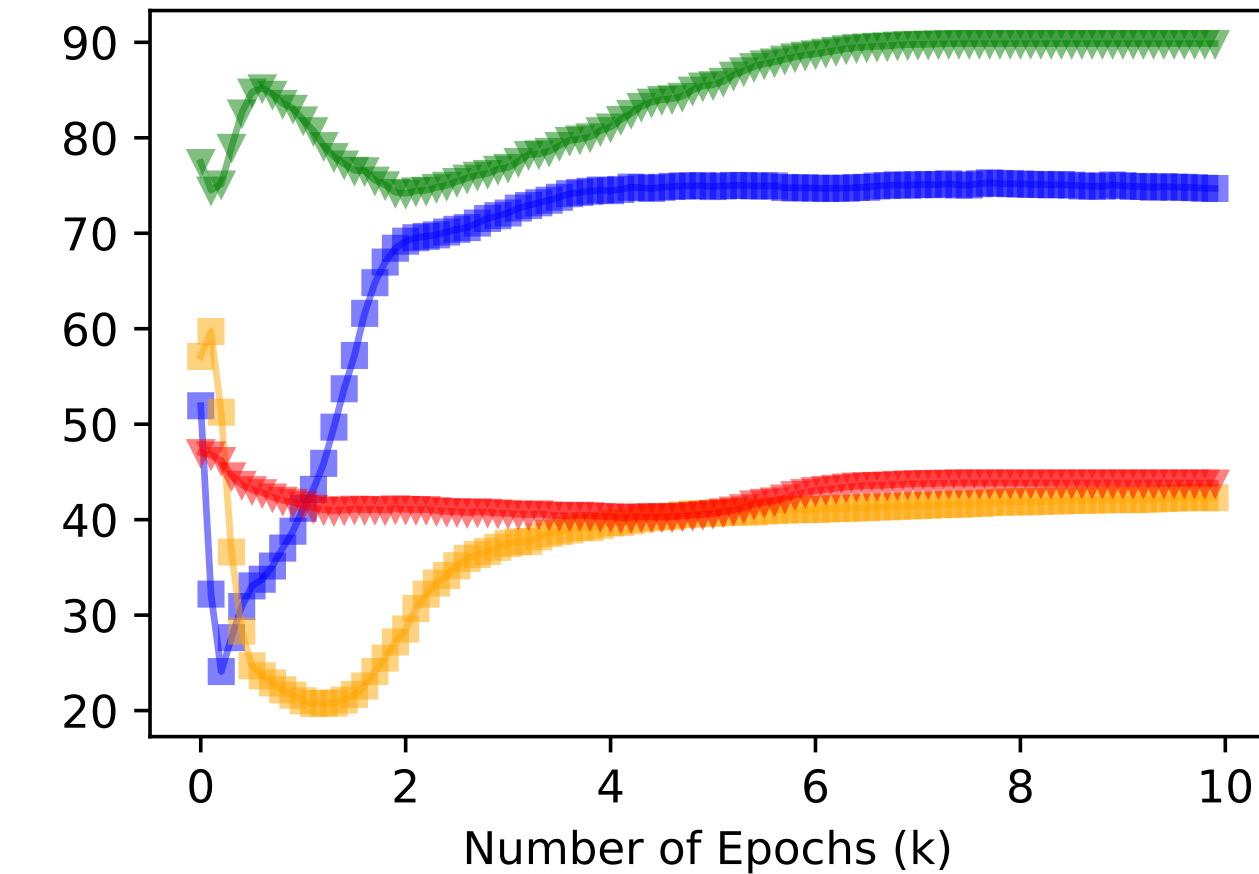
Syn A.4



Syn A.5



Syn A.6



■ Mean TPR (INVASE)
 ■ Mean FDR (INVASE)
 ▼ Mean TPR (INVASE Minus)
 ▼ Mean FDR (INVASE Minus)

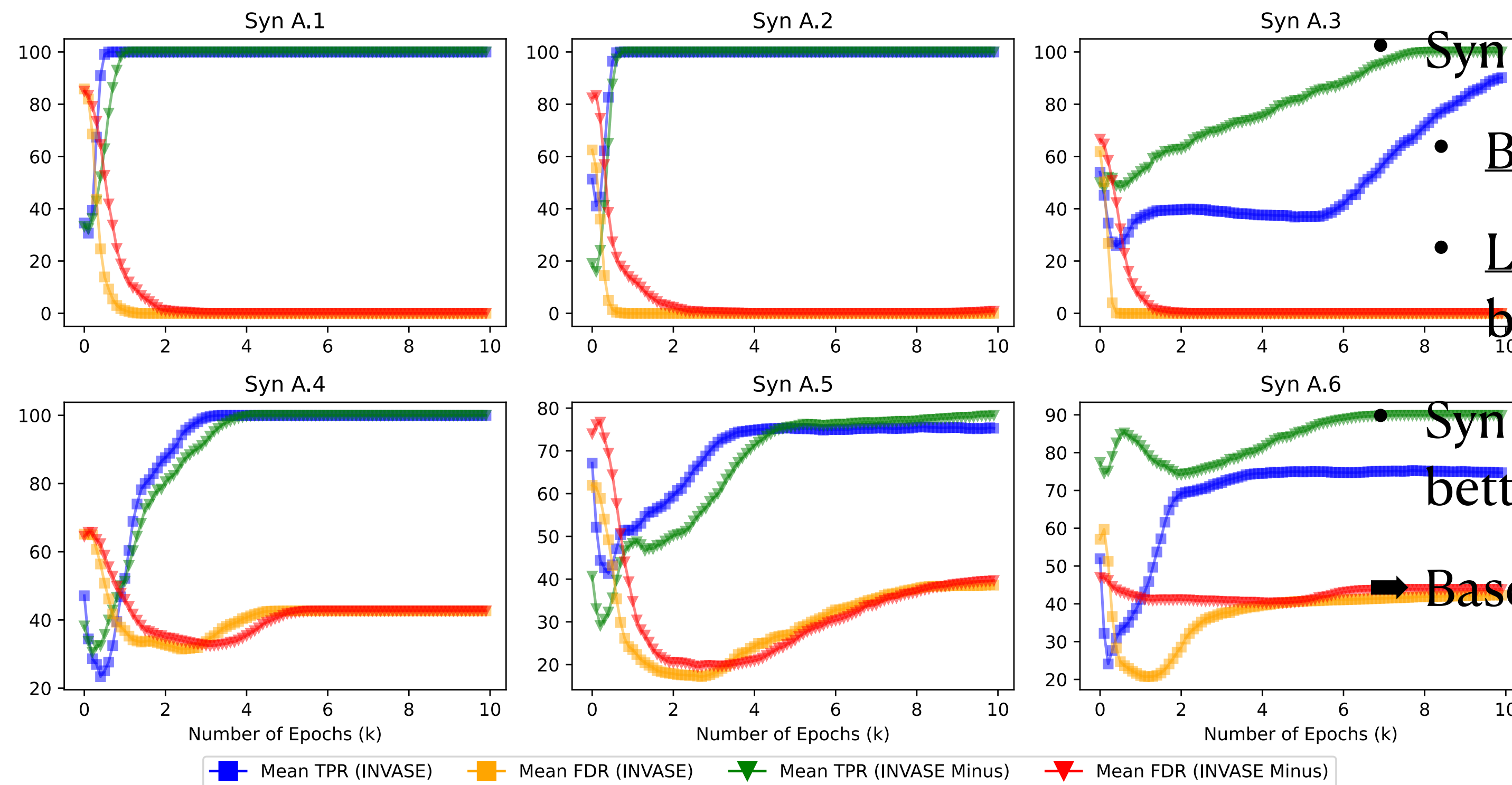
Individual Settings: $\lambda = 0.1$, Activation: ReLU.

→ **INVASE vs INVASE Minus**

- Syn A.1, A.2, A.4: Roughly same
 - Syn A.5: Very close
 - Beginning: INVASE slightly better
 - Longer training: INVASE Minus slightly better
 - Syn A.3 & A6: INVASE Minus ever perform better, especially on TPR
- ➔ Baseline model may not be redundant

Analysis of Performance Influencing Factors in INVASE

The Impact of Baseline Model → INVASE vs INVASE Minus



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→ Baseline model may not be redundant

Individual Settings: $\lambda = 0.1$, Activation: ReLU.

Analysis of Performance Influencing Factors in INVASE

Conclusion

1. Within the framework of INVASE, how do the following factors influence the explainer's ability to identify relevant features while discarding irrelevant ones?
 - C. How sensitive is the explainer's performance to the choice of hyperparameter λ ?