

**Department of Public Health & Preventive Medicine
Grand Rounds**

presents

**Selecting Variables when there are Missing
Values: A Case Study**

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ABSTRACT

In this presentation I will use an example from juvenile dermatomyositis and discuss various options for variable selection in the presence of missing values: use stepwise on the complete cases, replace the missing values with the means of the complete cases followed by a stepwise regression, use multiple imputation to obtain 20 imputed data sets and conduct stepwise on each. I report on these methods – in particular I use the Residual Sum of Squares and R^2 as measures.



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