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Shuo Chen* (shuo.chen@vanderbilt.edu), 571 Preston Building, Vanderbilt Ingram Cancer Center, Vanderbilt University, Nashville, TN 37202, and **Don Hong** and **Yu Shyr**. *Survival Analysis Based on High Throughput MALDI-TOF Protein Expression Profiling*. Preliminary report.

MALDI-TOF protein expression profiling has been proved an important tool to find disease-related proteomic patterns in cancer study. However, survival analysis based on the proteomics data will have the regression problems where the number of predictors greatly exceeds the number of observations, and conventional regression techniques may produce unsatisfactory results. Reasonable and efficient feature selection and dimension reduction tools are desirable. In this talk, several methods for survival time related feature selection and dimension reduction techniques are described. Also, asymptotic consistency results to help assess those models are provided. (Received August 22, 2005)