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Statistics found biomedically effective

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U.S. scientists say they have used "recursive partitioning" to identify a mix of neuroendocrine and immune markers that frequently predict mortality.

The University of California Los Angeles scientists and colleagues analyzed 13 biomarkers representing neuroendocrine and vascular functions and immune and metabolic activity over 12 years in 1,189 high-functioning men and women aged 70-79.

Among their research goals, the scientists sought to present "recursive partitioning" -- a statistical technique for identifying multiple and interacting predictors of an outcome -- as a useful analytical tool for addressing research questions in the biomedical sciences.

Using recursive partitioning, they found combinations of neuroendocrine and immune markers frequently appeared in high-risk male pathways, while systolic blood pressure was present, in combination with other biomarkers, in high-risk female pathways.

The finding suggests clinicians and researchers might be able to use recursive partitioning to identify the biological regulatory system's importance in predicting mortality in later life.

The study -- by scientists at UCLA, the University of Wisconsin, and Princeton University -- appears in the current issue of the Proceedings of the National Academy of Sciences.