Plasma Proteome Profiling to Assess Human Health and Disease

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For a doctor, he can diagnose patients' health state from the special protein level. Most typical method we used is using single-protein immunoassays. But immunoassays can not deal with the isoform protein. Also, if we use Mass spectrometry to track the proteomics, it will be difficult to handel the high dynamic range of proten abundance. So they found a method, which only cost about 3 hours to profile plasma proteome. Firstly, they collect 5 l blood to get 1 l plasma. Then, plasma are scaled up by automated machine. The HPLC will generate the raw data from sample. Finally, after data analysis, the level of protein can be draw out. Althoug this method can collect lots of plasma proteome data in short time, the key information of speical kind of protein are still rare. So, it will be a time for its large-scale use in biomedicine.