Pharmacodynamic Biomarkers and New Technologies

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Summary
The major purposes of pharmacodynamic biomarker studies in the early clinical setting are to contribute to determination of the recommended dose and schedule, and to provide a scientific background for new drugs. Appropriate, valid and simple pharmacodynamic biomarkers may be helpful to guide successful clinical development of new drugs. Meanwhile, emerging new technologies including microarray technology and next-generation DNA sequencing are expected to contribute to identification of predictive or prognostic biomarkers, which will expedite clinical trials in humans.

Key words
Pharmacodynamic biomarker, Microarray technology, Next-generation DNA sequencing, Exon array, Phase I study.