multi-center prospective clinical studies. A larger clinical study would allow for analysis of CYP2D6 allelic variations and would improve the causational link between the ultra-rapid metabolizers and Type 2 Diabetes Mellitus treatment. Subsequently, the results of such studies can justify the use of actionable CYP2D6 testing to help better predict diabetic drug response. Furthermore, such clinical studies can be applied to numerous drugs with a narrow therapeutic range to identify patients at risk for drug metabolism inefficiency.

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