Bioinformatics for Drug Formulations and Delivery System

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Drug companies spend more than $5 billion per year on IT. So what does this mean for drug delivery and formulation development as we know? An injectable or solid oral immediate or sustained released are "no brainers" for pharma in terms of dosage form selection. Now go have fun with solubility and stability, and its headache time or cocktail time, depending where you are in the world and your choice of vice. To combine the right chemical ingredients in the right proportions, driving the right reactions under the right conditions to achieve the right end product with the right properties requires an incredible amount of information and an incredible amount of knowledge. All this information and knowledge has to be available at the point of formulation. Managing the formulation process without iteration is the secret to reducing development time. Having software to provide the right information at the right place at the right time and you avoid costly, embarrassing mistakes and eliminate duplicate work. Today, a formulator could even identify promising formulation leads, store, and manage a pharma company's formulation portfolio or library. To quickly discard all about the leading options and eliminating time wasted on low probability routes while identifying the best and least expensive ingredient mix can save money and time. In the final analysis, this will allow drug delivery companies to be in a greater position of strength. Drug delivery companies can improve their odds of solidifying licensing and development deals on better terms.