

Considering The Impact Of New Legislation on Biologics In The US

ByErrol B. Taylor Lawrence T. Kass

Reproduced with permission from Financier Worldwide.





Errol B. Taylor and Lawrence T. Kass are partners at Milbank, Tweed, Hadley & McCloy LLP.

The Hatch-Waxman Act altered the competitive dynamics of the US pharmaceutical market in favour of generics by allowing them to rely on innovators' clinical trial data to show safety and efficacy, thereby avoiding the enormous time and expense associated with clinical trials. The Act also allowed generics to legally infringe for purposes of developing generic drugs and to mount early patent challenges. In return, some of the patent term lost in the regulatory approval process was restored to innovators and they were afforded exclusivity in certain circumstances to their clinical trial data for some period before generic applicants could rely on the data. Industry insiders have questioned whether the 'balance' struck by Hatch-Waxman has unduly favoured generics and has contributed to a general decrease in the innovative activity of the US pharmaceuticals industry. Against this backdrop, Congress this year enacted the Biologics Price Competition and Innovation Act (Biologics Act), which provides an abbreviated regulatory pathway for follow-on biologics (FOBs), or biosimilars. Comparing the Hatch-Waxman Act to the Biologics Act provisions may provide some insight into the possible effect of the latter on the future of biologics innovation in the US.

The Biologics Act is partially modelled after the Hatch-Waxman Act in allowing generic applicants to legally infringe for purposes of developing FOBs and in allowing applicants to mount early patent challenges. As with the Hatch-Waxman Act, innovators in return are afforded certain periods of exclusivity as incentives. Although the generic disclosure procedures under the Biologics Act are more complex than those under the Hatch-Waxman Act, basically the FOB applicant must disclose its application, a description of its manufacturing process and other information if necessary for the innovator to analyse the application. Like the Hatch-Waxman Act, the Biologics Act further incentivises generic entry by providing an exclusivity period for the first generic approved, so that a second generic applicant may not seek approval until the exclusivity period expires.

However, differences between small molecule drugs and biologics account for certain significant differences between the Hatch-Waxman Act and the Biologics Act. Small molecule drugs are often more readily made from chemical compounds synthesised on a large scale. Biologics are comparatively difficult to develop because they are generally more complex. Moreover, constructing

a manufacturing facility is typically more expensive and complicated. Recognising the substantially greater time and expense investment required to develop and manufacture biologic drugs, the Biologics Act provides for a greater data exclusivity period. Instead of a maximum of five years of data exclusivity under Hatch-Waxman, a biologics innovator may be allowed 12 years of exclusivity under the Biologics Act, regardless of whether any patents have expired before that time.

On the other hand, other differences in the Acts benefit the FOB manufacturer. For example, the Hatch-Waxman Act requires a generic active ingredient to be the same as the innovator active ingredient. In contrast, the Biologics Act provides some flexibility, recognising it may be difficult or impossible to exactly replicate biologics. Thus, the Biologics Act only requires an FOB to be "highly similar to the reference product notwithstanding minor differences in clinically inactive components". Nevertheless, due to the complexity of biologics, even slight differences may have significant effects on safety and efficacy. As a

result, the Biologics Act requires that the applicant demonstrate there is "no clinically meaningful differences between the biological product in terms of the safety, purity, and potency of the product". Unless waived by the FDA, biosimilarity must be supported by data from preclinical (analytical & animal) and human clinical studies. This means the default is that a biologics applicant must conduct at least some human clinical trials, rather than relying entirely on the innovator's clinical data. This is different from the approval pathway for generic small-molecule drugs, which does not require any clinical trials for safety and efficacy but instead allows the applicant to rely entirely on the innovator's clinical data. The FOB default requirement for additional clinical trials could prove significant as such studies could exceed four years. There are additional disadvantages to innovators under the Biologics Act. For example, unlike the Hatch-Waxman Act procedure, filing a patent infringement suit does not stay FDA's approval of the FOB application. This is a significant boon to the FOB applicant.

The foregoing comparison between the Hatch-Waxman Act and the Biologics Act suggests some differences that may affect the 'balance' between innovators and generics. However, on the whole the Biologics Act does not seem substantially worse for innovators than the Hatch-Waxman Act. It is therefore possible that the Biologics Act may not engender the same criticisms as the Hatch-Waxman Act about unduly disadvantaging innovators and decreasing innovative activity. While the impact of the Biologics Act should be carefully monitored, for the time being it should not deter investor interest in the US innovator biologics industry.

Errol Taylor "impresses with his legal strategy, scientific insight and business acumen." He is best known for his patent litigation work in the pharmaceutical and biotech fields, representing major names such as AstraZeneca and Merck.

- Chambers USA 2010