

***Biologics Price Competition  
and Innovation Act of 2009***

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# Biologics Price Competition and Innovation Act of 2009

- Biologics Price Competition and Innovation Act of 2009 (“**The Act**”) was signed into law by President Obama on March 23, 2010, as part of the Patient Protection and Affordable Care Act.
- The Act amends the Public Health Service Act (42 U.S.C. 262) by adding subsections (k) and (l).
- It provides an approval pathway for follow-on biological products via abbreviated biological license applications that are referred to as “subsection (k) applications”.

# Why was it necessary?

The Hatch-Waxman Act, passed by Congress in 1984, amended the Food, Drugs and Cosmetic Act to establish an abbreviated pathway for FDA approval of small molecule drugs. Under the Act, a company seeking to market a generic small molecule drug must demonstrate only that the generic is “bioequivalent” to the corresponding brand-name drug; it need not conduct large scale clinical trials demonstrating safety and efficacy.

## Why was it necessary?

The Hatch-Waxman Act, however, did not amend the Public Health Service Act, under which biopharmaceuticals are approved, and therefore it did not create an abbreviated pathway for the approval of biopharmaceuticals.

# What are Biologics?

- A biologic is manufactured in a living system such as a microorganism, or plant or animal cells. Most biologics are peptides, proteins or nucleic acids which are very large, complex molecules or mixtures of molecules.

# What are Biologics?

- Small molecule drugs are typically manufactured through chemical synthesis, which means that it is made by combining specific chemical ingredients in an ordered process.
- Small molecule drugs generally have well-defined chemical structures. By contrast it is difficult, and sometimes impossible, to characterize a complex biologic by testing methods available in the laboratory, and some of the components of a finished biologic may be unknown.

# What are Biologics?

- Biosimilars or follow-on biologics are not generic drugs. A generic drug is a product that is shown to be the same as an innovative drug, and is generally considered therapeutically interchangeable with the reference drug. Unlike generic drugs, a biosimilar is similar to, but not the same as, the RPS drug.
- Due to the complexity of Biologics, small product or manufacturing differences in biologics can result in significant safety and/or effectiveness differences.

# Why the ACT matters to you

- The average cost of biologic drug treatment is about \$72,000/year compared to about \$1,000/year for conventional “small molecule” pharmaceuticals
- It is projected By 2014, the biggest-selling meds will be biologics and that half of the top 100 drugs in 2014 will be biotech meds — a huge change from 2008’s level of 28 percent.
- By 2014, annual sales of biologics are projected to be \$169 billion.

# Why the ACT matters to you

- Roche's Avastin, a cancer med is expected to account for \$9.23 billion in 2014 sales.
- The next five top sellers, in order:
  - Humira (Abbott Labs),
  - Rituxan (Roche),
  - Enbrel (Wyeth/Amgen),
  - Lantus (Sanofi-Aventis), and
  - Herceptin (also Roche).

# Biosimilar v. Interchangeable

Biosimilar” product means:

(A) that the biological product is highly similar to the reference product notwithstanding minor differences in clinically inactive components; and

(B) there are no clinically meaningful differences between the biological product and the reference product in terms of safety, purity, and potency of the product.

# Biosimilar v. Interchangeable

- An “interchangeable” product is:
- Is expected to provide the same clinical results as the biological product for which the product may be substituted and may be provided without the intervention of the health care provider who prescribed the reference product.

# Biosimilar Product Applications [42 U.S.C. § 262(k)(2)(A)]

A “biosimilar” designation is based on:

- (1) analytical studies that show the biological product is “highly similar to the reference product notwithstanding minor differences in clinically inactive components,”
- (2) animal toxicity studies, and
- (3) clinical studies (including immunogenicity, pharmacokinetic, and pharmacodynamic studies) demonstrating the safety, purity, and potency of the biological study.

# Biosimilar Product Applications [42 U.S.C. § 262(k)(2)(A)]

The application must also demonstrate that the biological product and the reference product utilize the same mechanisms of action for the prescribed conditions of use in the proposed labeling, to the extent such mechanisms of action are known for the reference product.

# Interchangeable Product Applications [42 U.S.C. § 262(k)(2)(B) & (k)(4)]

A biosimilars application for an “interchangeable” biological product must contain:

- information sufficient to show that the biological product “can be expected to produce the same clinical result as the reference product,” and
- for biological products that are administered to a patient more than once, that the safety risk or diminished efficacy risk or alternating between the reference product and the biological product is no greater than using the reference product without switching or alternating.

## Exclusivity for the First Biological Product to Receive a Determination of Interchangeability [42 U.S.C. § 262(k)(6)]

The first biological product that receives a determination of interchangeability shall have an exclusivity period ***until the earlier of:***

- (A) 1 year after the first commercial marketing of the first interchangeable product;
- (B) 18 months after a dismissal (with or without prejudice) or a final court decision on all patents in suit in an action instituted under this Act; or
- (C) 42 months after approval of the first interchangeable product if that applicant has been sued and the litigation is still on-going, or 18 months after approval of the first interchangeable product if that applicant has not been sued.

# Exclusivity for the Reference Product [42 U.S.C. § 262(k)(7)]

- No biosimilar application may be approved until **12 years** after the date the reference product was first licensed.
- No biosimilar application may be submitted to the FDA until **4 years** after the date the reference product was first licensed.

# Guidance Documents [42 U.S.C. § 262(k)(8)]

- The FDA may issue class-specific guidance documents that establish the criteria that will be used to determine whether a biological product is highly similar to a reference product and what criteria will be used to determine interchangeability.
- The FDA may also issue guidance documents that explain that the science and experience do not allow for approval of a biosimilar or interchangeable biological product.

## Reference Product Sponsor's Confidential Access to Subsection (k) Applicant's Information [42 U.S.C. § 262(l)(1)-(3)]

The Biosimilars Act does not provide for an Orange Book-type patent listing document. Instead, within in 20 days after an application has been accepted for review, the applicant must provide to the RPS:

- (1) a copy of the biosimilar application,
- (2) other information that describes the process used to manufacture the biosimilar product, and
- (3) additional information requested by . . . the RPS.

## Paragraph (3): Exchange of Patent Information [42 U.S.C. § 262(l)(3)]

Within 60 days of receiving the information from the biosimilars applicant, **RPS shall provide:**

- (1) a list of patents for which a claim of patent infringement is believed could reasonably be asserted by the RPS as infringed by the biosimilar's application and
- (2) an identification of the patents on the list that the RPS would be prepared to license to the biosimilars applicant.

## Paragraph (3): Exchange of Patent Information [42 U.S.C. § 262(I)(3)] V&E

**The biosimilars applicant provides** within 60 days of receiving the RPS's list:

- (1) a list of patents it believes would be infringed by its biosimilars' application;
- (2) for each patent listed, a description of the factual and legal basis that each patent is invalid, unenforceable, or will not be infringed by the biosimilar applicant, and
- (3) a response regarding each patent that the RPS identified as available to be licensed

## Paragraph (3): Exchange of Patent Information [42 U.S.C. § 262(l)(3)] *(con'td)*

**The RPS provides** within 60 days of receiving the biosimilar applicant's response, the reference product sponsor shall provide to the biosimilars applicant:

- (1) a description of the factual and legal basis of why each listed patent will be infringed by the commercial marketing of the biosimilars applicant's biological product and
- (2) a response to the biosimilars applicant's statements concerning the validity and enforceability of the listed patents.

### 3. Paragraph (4): Patent Resolution Negotiations [42 U.S.C. § 262(I)(4)]

After information has been exchanged , the RPS and biosimilars applicant shall engage in good faith negotiations to agree on which patents shall be the subject of an action for patent infringement. If the parties fail to reach agreement within 15 days, the provisions of paragraph (5) shall apply.

## Paragraph (5): Patent Resolution if No Agreement [42 U.S.C. § 262(l)(5)]

If the parties do not reach agreement on the patents to be litigated, the biosimilars applicant may notify the RPS of the number of patents that it will provide to the RPS on an agreed upon date that is not later than 5 days after the notification.

On the agreed upon date, the biosimilars applicant and the RPS exchange a list of the patents that each believes should be litigated. The RPS's list of patents may not exceed the number of patents listed by the biosimilars applicant, unless the biosimilars applicant lists 0 patents.

## Paragraph (5): Patent Resolution if No Agreement [42 U.S.C. § 262(I)(5)] *(cont'd)*

V&E

Biosimilar applicant has incentive to list all relevant patents to avoid RPS's last minute injunction option under 42 U.S.C. § 262(I)(8)]

## Paragraph (6): Patent Infringement Action [42 U.S.C. § 262(I)(6)]

If the parties agree on the patents to be litigated, the RPS shall bring an action within 30 days of such agreement.

If the parties utilize the resolution process under paragraph (5), the RPS shall bring an action within 30 days after the parties exchange lists of patent under paragraph (5). The RPS shall bring an action for each patent that is included on the lists.

## Paragraph (7): Newly Issued or Licensed Patents [42 U.S.C. § 262(l)(7)]

If a patent is issued or exclusively licensed to the RPS after the parties exchange patent information, the RPS may supplement the list of patents to be litigated provided within 30 days of the issuance or licensing. In response, the biosimilars applicant will supplement its response regarding the infringement, validity, and enforceability of the newly issued or licensed patent.

## Paragraph (8): Notice of Commercial Marketing and Preliminary Injunction [42 U.S.C. § 262(I)(8)]

At least 180 days prior to first commercial marketing, the biosimilars applicant must provide notice to the RPS. The RPS can then seek a preliminary injunction against the biosimilars applicant for patents:

- Included on one of the parties patent lists; or
- But not for those included on the lists of patents to be litigated.

## Paragraph (9): Limitations on Declaration Judgment Actions [42 U.S.C. § 262(l)(9)]

So long as the biosimilars applicant provides the initial confidential information described in paragraph (2), neither the biosimilars applicant nor the RPS may bring a declaratory judgment action for any of the non-litigated patents identified by the RPS

# Hatch Waxman vs. Biosimilars Act

	Hatch Waxman	Biosimilars Act
Reference Product Exclusivity	5 yrs	12 yrs
Structural Identity of API	Yes	No
Efficacy Clinical Data	No	Yes
First Generic Filing	4 yrs	4 yrs
First to File Exclusivity	6 months	No- biosimilar 6 mth-IC
Patent Listing	Yes	No

# Hatch Waxman vs. Biosimilars Act

	Hatch Waxman	Biosimilars Act
Generic Filing=Infringement	Yes	Yes
Litigation rules	Yes	Yes
Stay of FDA Approval	Yes	No
Certification of Defenses	Yes	Yes
Injunctive relief	Yes	Yes
Damages	Yes	Yes

**Questions?**