Evaluate Vantage

September 24, 2015

Biosimilar upheaval picks up speed as Avastin copy comes good

Jonathan Gardner

The targets are growing. Amgen and Allergan's announcement of positive phase III results for an Avastin biosimilar signifies how quickly the field is accelerating now that the first lookalike biological, Zarxio, has passed muster with US regulators.

While the first biosimilar antibody is in regulatory limbo, developers also are nearing pivotal readout of Humira, Rituxan and Herceptin duplicates. At a forecast $3bn in US sales in 2015, Avastin represents a huge target and demonstrates how Roche is one of the most exposed companies to biosimilar risk through the end of the decade.

Queueing up

The Amgen/Allergan project is code-named ABP 215, and showed clinical equivalence to Avastin as measured by objective response rates in non-small cell lung cancer, along with safety and immunogenicity.

Assuming that the partners submit the candidate to the FDA relatively soon, ABP 215 would join a queue that also includes the Celltrion/Pfizer version of Johnson & Johnson's Remicade and the Pfizer lookalike of Amgen's own Epogen.

The partnership dates back to 2011 when Allergan's predecessor Watson Pharmaceuticals committed $400m to co-develop antibodies using Amgen's biological manufacturing capacity. Regulatory success would show that Amgen can be predator as well as prey in this quickly shifting space, as its own biological franchises are coming under attack.

As Amgen challenges Roche's patent estate on one hand, it is also defending its own with a lawsuit filed last week against Pfizer's Hospira division because of an Epogen-like project called Retacrit; The California-based biotech claims that Hospira did not engage in patent exchange as required under Affordable Care Act, the so-called "patent dance" that has landed all the players in this space in court.

Retacrit's decision deadline is next month, so court rulings stand a chance of stringing the launch out by weeks or months, as happened with Zarxio earlier this year.

So far it is just Amgen's smaller proteins – Neupogen, Neulansta and Epogen – that have been under assault. But in its partnership with Allergan, specifically around cancer antibodies, Amgen has been able to turn and pick on an equally vulnerable target in Roche.

Delays, delays

There was some hope that the very first antibody would have been on the market by now – the Celltrion/Pfizer Remicade, called Remsima, has been delayed as the agency has sought more data. The FDA advisory panel that would consider it has a meeting scheduled in October, but Remsima is not on the agenda.

Remicade is J&J's only antibody due to lose market exclusivity before the decade is out. Roche, however, looks every bit as exposed as Amgen to the arrival of biosimilars, with Amgen aiming at Avastin and Pfizer the $2.4bn Herceptin and $3.9bn Rituxan.

Moreover, unlike Amgen, the Swiss group does not appear to be active in developing its own biosimilars, choosing the riskier but perhaps more rewarding strategy of innovating and buying its way past patent expiries. This has resulted in recent launches of the antibodies Perjeta and Kadcyla, development of the immuno-oncology agent atezolizumab and the acquisition of InterMune for Esbriet.

A look at the comparative patent risks of the two companies suggest that Roche's strategy has been more successful, which is perhaps why Amgen has been so keen on this biosimilar space.

A tale of two companies: US patent risk, Roche vs Amgen ($m)						
	2015	**2016**	**2017**	**2018**	**2019**	**2020**
Roche						
Sales at risk*	15,900	16,749	16,999	17,026	15,863	17,776
Sales lost from patent expired products	-306	-29	-145	-767	-981	-939
Sales replaced	1,954	1,229	1,547	1,871	1,836	2,210
Amgen						
Sales at risk*	7,589	7,051	6,852	6,107	8,572	8,387
Sales lost from patent expired products	-114	-575	-571	-771	-967	-344
Sales replaced	1,097	997	998	619	545	425
*Note: *expired products, and those due to expire in less than 5 years; source: EvaluatePharma.*						

A biosimilar is unlikely to replace fully the sales of a product lost to patent expiry, which explains why Roche's product sales at no point shrink during the five year outlook in the *EvaluatePharma* consensus.

Roche's other saving grace, of course, is that it is not quite as dependent on a single biological as is AbbVie. How much Humira competition will damage AbbVie is a controversial topic among pharma watchers, and is a microcosm of the greater debate over what biosimilars will do to the industry as a whole.

To contact the writer of this story email Jonathan Gardner in London at jonathang@epvantage.com or follow @ByJonGardner on Twitter