Evaluate Vantage

March 21, 2019

China’s blueprint for a checkpoint blocker price war

Jacob Plieth

A price war over anti-PD-(L)1 drugs is raging in China, less than a year after the first one was approved. When could the US see something similar?

In pharma the first rule of competing on price is that you don’t talk about competing on price. But a US price war in anti-PD-(L)1 drugs could be coming all the same, and at least one company has broken rank and vowed to challenge the status quo.

A blueprint exists in China, of course, where the makers of four such drugs to be greenlit since last June are already falling over themselves to undercut each other. True, market dynamics in the two countries are very different, but the tacit agreement not to start a US price war might not continue for much longer.

As it stands the US boasts no fewer than six approved anti-PD-(L)1 drugs, yet – in true pharma industry fashion – no company has dared challenge the leaders on price. The latest entrant is Sanofi/Regeneron’s Libtayo, and though approved in a niche indication it was launched with a list price in line with those of Keytruda and Opdivo.

The reason for picking a niche indication is that it offers the prospects of a fast approval on limited data. Once on the market, a deeply discounted price could spur off-label prescribing, it might be argued.

How low?

Checkmate Therapeutics, a listed subsidiary of Fortress Biotech, has openly floated its aim to compete on price with CK-301, an anti-PD-L1 asset it licensed from Dana-Farber. It aims to “enter the market at an attractive price point to gain market share”, an October 2018 corporate presentation revealed.

Agenus, too, is understood to have mooted the idea of going in low with its CTLA-4/PD-1 combo AGEN1884/AGEN2034. How deep a discount this might entail will not become clear until one of these drugs is launched, and that is still years away.

But China offers a taste of things to come that the leading players will not find too palatable. Here, Opdivo and Keytruda were launched at a 40-60% discount to their US list prices.

And what really shook things up was the pricing of the third entrant, Shanghai Junshi’s Tuoyi: a 70% discount to Opdivo’s China cost, or an incredible 90% less than the US list price.

The fourth entrant, too, has been priced competitively: Innovent's Tyvyt has been pitched slightly higher than Tuoyi, but still at a massive discount to Opdivo and Keytruda. Jiangsu Hengrui's camrelizumab and Beigene's tislelizumab are awaiting local approval, so the scope for further discounting is considerable.

How low can you go? China's approved anti-PD-(L)1 drugs

Drug	Company	Dose	US cost/4wk	China cost/4wk
Opdivo	Bristol-Myers Squibb	240mg q 2wk	$16,195	$6,910
Keytruda	Merck & Co	200mg q 3wk	$12,948	$8,030
Tuoyi	Shanghai Junshi Bioscience	3mg/kg q 2wk	NA	$1,880*
Tyvyt	Innovent	200mg q 3wk	NA	$3,000**

*Source: product labels & market info. Note: wholesale acquisition cost; *based on a 70kg patient; **estimate, based on report of monthly price including patient-assistance programme.*

"We see a price war looming in China for PD-(L)1s," Tony Ren, a biopharma analyst based in Hong Kong, told *Vantage*. He added that the list prices excluded assistance programmes, which would normally save a patient RMB60,000-80,000 ($9,000-12,000) a year, but only for a drug's on-label indication.

This is important, because off-label use in China is substantial, especially for drugs whose costs are mostly borne by patients. Mr Ren cited Hengrui's gastric cancer drug apatinib, which he said generated over 60% of its China sales this way, and said Shanghai Junshi's strategy was likely to secure Tuoyi approval in a narrow indication and then sell off-label.

Such thinking might not translate precisely to the US, but if a company were to launch at a severe discount it could disrupt the market. And even without evidence that the newcomer was as good as, say, Keytruda, a patient might prefer a cheap anti-PD-(L)1 to no anti-PD-(L)1 at all.

Still, could companies like Checkpoint and Agenus – small-caps with few successes to speak of – actually bring a drug to market? Checkpoint's plan to pursue endometrial cancer with CK-301 is on shaky ground as of yesterday, when Glaxosmithkline reported impressive data in this same niche with dosarlimab.

Should a US price war not come about, it is also worth considering whether there comes a point at which an anti-PD-(L)1 drug's price in China makes medical tourism viable, at least for those cancer patients able to travel.

Either way, with numerous players already on the market and several waiting in the wings, the potential for disruption should not be underestimated.