Use of biomarkers in marketing

by Mark Assenti

Prognosis biomarkers vs predictive biomarkers

The modern pharmaceutical market can be saturated with competing products, from bio-similar to same in-class to alternative MoA treatments. Standing out from the crowd can be tough; innovative and patient serving methods of differentiation are hard to come by.

HCPs can struggle to find the right treatment for their patients and the cost of switching between products is often financially and emotionally high. Therefore, there is a need to personalise medicine for the individual; ensuring maximum efficacy, reducing conversion costs, as well as to be able to differentiate and position products within the treatment pathway.

When we think of biomarkers, we usually imagine the detection of genetic disorders such as Huntington’s disease and Alzheimer’s; these are prognosis biomarkers. As we explore and understand more and more of the human genome, we are discovering more and more biomarkers, not just limited to disease diagnosis.

Biomarkers are being used to determine a person’s genetic predisposition to respond well to certain treatments; these are predictive biomarkers. Investment and utilisation of this tool is a trend that we have seen growing in 2014 and predict to hear even more about into 2015.
Let’s take an anonymous example to explore the power of this tool

A crowded market of biologics treating a chronic disease with very similar efficacy and safety evidence, all fighting for market leader position.

Detection of a predictive biomarker present in 60% of all patients shows, through retrospective analysis of clinical data, that efficacy levels in this patient segment are greatly increased for Product X. 95% of these patients achieve the primary endpoint compared to 70% of the general population (and market average) and continue to achieve results well after the ‘average patient’ has switched between treatments.

By segmenting patients in this way, pharma companies can:

- Identify patients suitable for 1st line treatment
- Guarantee X% market share (dependant on biomarker prevalence within the population)
- Differentiate themselves from competitors
- Offer a genuine service ‘around the pill’ with clear patient benefits

The identification of a favourable predictive biomarker can not only optimise the life cycle of a product, but completely reshape marketing campaigns and pricing strategy. Commercial messaging developed around a patient subset with guaranteed superior results is hugely powerful, and can ignite key stakeholder engagement.

Biomarkers influence regulatory positioning and can determine, to an extent, the placement of a product in the treatment pathway. Pricing can also be impacted; the inclusion of a ‘free’ biomarker diagnosis test is an option and some protection from price erosion in saturated markets may be possible.

Biomarkers do have their limitations of course, their success and approval is hugely dependant on the evidence gathered and some marketers will fear removing potential customers by segmenting the market in this way. Despite this, pharma is becoming less reserved and beginning to see the true potential of this powerful scientific marketing tool. As knowledge in this area grows and certain pharma companies lead by example, we anticipate greater investment in this field and a trend towards the utilisation of biomarkers in brand strategies.