How does the expiration of a pharmaceutical firms’ drug patent affect the firms’ R&D decisions? We attempt to answer this question by combining data from the FDA Orange Book dataset on drug patents with firm-level data from the Pharmaprojects database. We utilize a logistic probability model to determine how patent expiration affects the chances that a firm will undertake certain actions to mitigate the negative effects that patent expirations have on revenue streams. In doing so, we find that firms that are nearing patent expiration begin testing of new products and seek new licensing opportunities for existing products, rather than discontinue existing products.