

# *Innovation Policy and the Market for Vaccines*

*Q. Claire Xue and Lisa Ouellette*

With the ability to stem the spread of highly infectious diseases and the potential to eradicate them completely, prophylactic vaccines play a crucial role in maintaining global public health. However, they have received far less attention in innovation policy scholarship than have pharmaceutical products used to treat disease. We focus on two aspects of vaccines that make them economically different from therapeutics. First, vaccines are preventives: their consumption gives rise to substantial positive externalities; yet, for a given disease, in the presence of heterogeneous disease risk, they will be less profitable than treatments. Second, for the most part, vaccines are single-use: rather than making repeated purchases over the course of disease, consumers make one lump-sum payment to never contract the disease in the first place. Both of these features cause even firms with market power to underinvest in vaccine R&D relative to multiple-use treatments. We conclude by discussing how innovation policy might be reformed to address this distortion.