

Category	Positive Impacts	Negative Impacts
Environmental	<ul style="list-style-type: none"> <li>Allows for the targeting of problematic bacteria in nature (e.g. targeting of unwanted biofilms coating pipelines)</li> </ul>	<ul style="list-style-type: none"> <li>The targeting of specific bacteria could disrupt natural ecosystems (e.g. natural biofilms supporting other organisms are targeted)</li> <li>We decide which bacteria are problematic for us and select which we think are beneficial for us (i.e. there is no longer natural selection)</li> </ul>
Ethical		<ul style="list-style-type: none"> <li>How will clinical trials be established and ethics granted (especially if giving live bacteria to people)?</li> <li>Giving of live bacteria to people (i.e. Champion Cells)</li> </ul>
Legal		<ul style="list-style-type: none"> <li>How would be in charge of regulation and quality control?</li> <li>Researchers working in the lab with extremely pathogenic and virulent bacteria. Something goes wrong... who's to blame?</li> <li>Who is responsible if something goes wrong when live bacteria are given to patients to treat infection?</li> </ul>
Economic	<ul style="list-style-type: none"> <li>Availability of new antibiotics may lead to cheaper treatments of infection than current multi-drug regimes</li> <li>Faster detection of infections and treatment may increase turn-around time thereby decreasing the economic burden on the Health Care System</li> </ul>	<ul style="list-style-type: none"> <li>Who will profit from this idea/treating of infection?</li> <li>Patents on signalling molecules? Bacteriocins? Quorum-coupled Bacteriocin Release Systems (i.e. engineered organisms)?</li> <li>Is access to these new treatments determined on a financial basis?</li> <li>Who will pay for these treatments? Governments? Patients?</li> </ul>
Social (including Medical)	<ul style="list-style-type: none"> <li>May help in the targeting of bacterial-based bioweapons, thus rendering them useless</li> <li>Availability of new antibiotics to fight infection. Improved treatments from perspective of side-effects and recovery time.</li> <li>Faster detection of causative organisms of an infection using biosensor ability of system</li> </ul>	<ul style="list-style-type: none"> <li>People may refuse new treatments because they feel uncomfortable with being given live bacteria to cure infections</li> <li>People may feel uncomfortable with being treated with engineered organisms</li> <li>Development of new antibiotic resistance to bacteriocins because of failure to comply with treatment regime</li> </ul>